



University of Cambridge | 2019 | www.acbiode.com

A cleantech start-up with expertise on chemistry, material science, and electronics. They are developing AC battery systems and also developing catalysts for plastic chemical recycling. Based in Luxembourg, Japan, and the UK.



#### **Acera Surgical**

Washington University in St. Louis | 2014 | https://acera-surgical.com

Born from research and bold patient-focused innovation, Acera is a bioscience company developing and commercializing groundbreaking soft-tissue repair products. Acera's synthetic hybrid-scale fiber matrices are designed to be structurally similar to human tissue, resist enzymatic degradation, offer both flexibility and strength, and allow more effective healing before completely resorbing. Acera is revolutionizing healing, changing lives.



#### **Acorn Genetics**

Northwestern University | 2022 | https://www.acorngenetics.com

Acorn Genetics is decentralizing genetic sequencing, making it more affordable, accessible, and autonomous for clinicians and patients alike. Using AcornLab, a fully automated novel third-generation genetic sequencer, individuals can sequence their DNA from anywhere for a fraction of the cost and time without any training. This new sequencing technology offers a high level of accuracy without the complexity and time necessary for a traditional genetic test, while also guaranteeing privacy by keeping the results within the hands of the consumer and/or their doctor.

The company closed a pre-seed round and moved into Portal Innovations incubator in Chicago.



#### **Acoustic Wells**

Massachusetts Institute of Technology | 2020 | https://acoustic-wells.com/

Acoustic Wells is focused on democratizing Industry 4.0 innovations through use of novel signal processing & physics know-how with easy-to-use IoT hardware & software, starting in the legacy oil & gas space.

Their initial products include a series of sensors to monitor both tanks and the wellhead that connect to their cloud platform, allowing operators to run their assets smarter and cleaner than ever before, all at a price point order of magnitude below the cost of traditional monitoring or control options. Acoustic Wells is based in Somerville, Massachusetts.



#### Adhesys Medical

# Formerly Medical Adhesive Revolution | RWTH Aachen University | 2014, First Place | Acquired

Adhesys Medical developed novel polyurethane-based medical adhesives. Their topical adhesive, CUTIS was designed for wounds and surgical incisions. Their biodegradable surgical sealant, VIVO was used internally to stop bleeding, seal wounds, and reinforce suture lines. It was the first hemostatic sealant that worked in a wet environment. The company won MassChallenge Boston in 2016 and were the grand prize winners at the 2014 RBPC.

Adhesys announced its acquisition by the Grünenthal Group at the 2017 RBPC. Based in Aachen, Germany, Grünenthal is an entrepreneurial, science-based pharmaceutical company specializing in pain, gout, and inflammation.

ADVANCED OPTRONICS

# **Advanced Optronics**

#### Carnegie Mellon University | 2022 | https://advancedoptronics.com

Advanced Optronics (AO), co-founded by a team of engineers from Carnegie Mellon University, is developing flexible, biocompatible sensor systems to enable smarter, less invasive surgery for a variety of medical applications. Their first product provides real-time feedback to reduce surgical trauma during cochlear implant surgery.



#### Advano

#### Tulane University | 2015 | www.advanotech.com

ADVANO is powering people's lives with advanced battery technology. Founded in 2016, ADVANO has developed a next-generation silicon technology for Lithiumion batteries. ADVANO utilizes earth-abundant raw materials and a sustainable and scalable manufacturing process to create high-performance silicon anode materials.

Located in New Orleans, LA, ADVANO is committed to accelerating American clean energy manufacturing. With ADVANO's REALSi™ technology, electric vehicles can drive further, consumer electronics can last longer, and the US can enable the electrification of everything.



### **AeroShield Materials**

# Formerly AeroShield | Massachusetts Institute of Technology | 2019 | www.aeroshield.online

AeroShield Materials is making the world's most thermally insulating transparent inserts. Just four millimeters of their material inside a double-pane windows creates a product that is 65% more energy efficient, saving homeowners money and saving the environment. AeroShield is currently completing industry-standard performance and durability testing with the goal of launching first products in the next 1-2 years.



### **AgZen**

Massachusetts Institute of Technology | 2021, Second Place | http://www.agzen.com/

Only 2% of sprayed pesticide reaches its target on plant surfaces as a majority of what's sprayed bounces off. This inefficiency forces over-spraying and results in the pollution of soil, water sources and the atmosphere. This contamination leads to up to 200K deaths and 5 million illnesses including cancer and neurological disorders every year. AgZen's field-tested and patented spray and formulation technology allows farms to reduce pesticide usage by 50% while maintaining crop health and yield.

AgZen has won numerous awards, including \$50K at the MIT 100K Competition in 2020 and over \$500K in investment and prizes at the Rice business plan competition in 2021, and they have raised a seed round. They are currently hiring in their engineering and sales teams.



# Ai-Ris

#### Texas A&M University | 2021 | https://ai-ris.org

Ai-Ris has developed an automated retinal exams for primary care. The company provides a point-of-care ocular diagnostic system, using machine learning and low-cost hardware, to prevent vision loss in vulnerable populations. The technology is protected by U.S. Pat. 11,382,506. Ai-Ris is based in College Station, Texas.



#### **Aktiv Learning**

#### Formerly 101 | Carnegie Mellon University | 2017 | Acquired

Aktiv Learning (formerly 101edu) is transforming STEM education with a next-generation learning platform that fosters student engagement and improves student outcomes. The company's first product for chemistry courses, Aktiv Chemistry (formerly Chem101), has quickly acquired adoptions at 1 out of 10 colleges and universities across North America. Recent surveys of 6,000+ Aktiv Chemistry students demonstrated that 86% of users become more engaged or interested in chemistry after using the platform. The company's newest product, Aktiv Mathematics, is now revolutionizing how students learn in Developmental Math and other lower-division college math courses.



#### AlgenAir

#### University of Maryland | 2020 | https://algenair.com

AlgenAir was co-founded by Dan Fucich, PhD and Kelsey Abernathy, PhD while finishing their doctoral research in marine biotechnology. They wanted to apply the incredible potential of algae to improve indoor air quality. The aerium was created to reduce carbon dioxide and increase oxygen indoors. It works synergistically with plants by recycling the algae as an all natural organic fertilizer. The aerium makes it easy for anyone to grow spirulina from plant enthusiasts to those without a green thumb and brings the photosynthetic power of 25 house plants to any room in your home.

### **Algeon Materials**

#### Algeon Materials

#### University of California, San Diego | 2022 | www.algeonmaterials.com

Algeon Materials is leveraging ocean derived materials to create sustainable solutions. They are developing sustainable and biodegradable plastics from seaweed and kelp. The team recently completed the Berkeley Skydeck Pad Accelerator.



#### **Alleviant Medical**

#### Rice University | 2017 | http://alleviantmedical.com

Alleviant Medical, Inc. is a medical device company developing a minimally invasive, implant-free device under clinical investigation for the treatment of chronic heart failure. The Alleviant System was granted U.S. FDA Breakthrough Device Designation in 2021. Headquartered in Austin, Texas, Alleviant is a privately held company backed by S3 Ventures, RiverVest Venture Partners, Vensana Capital, Broadview and Longview Ventures, Gilmartin Capital, ShangBay Capital, TMC Venture Fund, and undisclosed strategic investors. A recent funding round will fund the company's global pivotal trial, ALLAY-HF (Safety and Efficacy of the Alleviant System for No-Implant Interatrial Shunt Creation in Patients with Chronic Heart Failure). ALLAY-HF is designed to demonstrate the safety and effectiveness of the Alleviant System for the treatment of heart failure through left atrial decompression.



#### **Allianse**

#### Formerly Aspire360 | Columbia University | 2021 | https://www.allianse.com/

Allianse connects pre-seed to Series A startups and investors. The Allianse platform connects investors to vetted startups in an unbiased way both through search and tailored recommendations. Entrepreneurs get introductions to capital aligned with their mission and investors get early access to (and the ability to follow the journey of) startup deals they might miss otherwise. CEOs also utilize the Allianse input tool to get valuable business insights so that they can iterate and grow faster, and bring in advocates and mentorship as needed.



#### **Almond Fintech**

# Formerly Almond Finance | Massachusetts Institute of Technology | 2021 | https://almondfintech.com

Almond FinTech is a blockchain-based funds transfer network connecting financial institutions globally. Almond's infrastructure is built for speed, security, and accessibility, enabling users worldwide to send money across borders using their existing financial institutions. Additionally, Almond uses a combination of psychometric and financial data to provide fast, low-risk, ethical loans to communities with unconventional or limited credit histories.

The company is based in Boston and Singapore.



#### **Alva Industries**

# Formerly Alva Motor Solutions | Norwegian University of Science and Technology | 2018 | www.alvaindustries.com

They produce high-end electric propulsion systems for the most demanding UAV-applications. Their electric motors are designed and manufactured in Norway according to tightly controlled procedures with full traceability. Their proprietary manufacturing method FiberPrinting™ enables us to produce motors with high efficiency, state-of-the-art torque density and superior reliability.

They are on a mission to become the leading supplier of electric propulsion systems for industrial drones.



### **Ambig**

# Formerly Ambiq Micro | University of Michigan | 2010, Fifth Place | www.ambiqmicro.com

Ambiq's mission is to develop the lowest-power semiconductor solutions to enable intelligent devices everywhere by developing the lowest-power semiconductor solutions to drive a more energy-efficient, sustainable, and data-driven world.

Ambiq has helped leading manufacturers worldwide develop products that last weeks on a single charge (rather than days) while delivering a maximum feature set in compact industrial designs. Ambiq's goal is to take Artificial Intelligence (AI) where it has never gone before in mobile and portable devices, using Ambiq's advanced ultra-low power system on chip (SoC) solutions. Ambiq has shipped more than 200 million units as of March 2023.

The Austin, Texas-based company placed fifth at the 2010 Rice Business Plan Competition.

#### anina iris

#### **ANIMA IRIS**

### University of Pennsylvania | 2021 | http://www.animairis.com

Elevated high fashion brand for the modern woman. Every piece in the Anima Iris collection is carefully handcrafted by seasoned professionals in Dakar, Senegal.

With centuries old African craftsmanship at the tip of their fingers, their artisans add a touch unrivaled in quality and attention to detail to create limited edition pieces. They partner with local Senegalese business owners to acquire materials and their leathers are sourced in limited quantities. In keeping with their promise to sustainability, throughout the manufacturing process they utilize a zero-waste model. This ensures that no two creations are the same and no material is wasted. The bags are sold the website, Nordstroms, Bloomingdales, and Saks Fifth Avenue.

# anisehealth

#### **Anise Health**

#### Harvard University | 2022, Seventh Place | www.anisehealth.co

Anise Health is a culturally-responsive digital mental health and wellbeing platform dedicated to meeting the unique needs of communities of color, starting with a focus on the Asian American population.

They are founded by two minority female alumni of Harvard Business School and their clinical program is directed by Dr. Janie Hong, psychologist and Clinical Associate Professor at Stanford University School of Medicine. She is a founding partner at the Redwood Center for CBT and Research, where she maintains a small private practice. She also is the current chair of the Asian American in Behavior Therapy and Research Special Interest Group in the Association for Behavioral and Cognitive Therapies.

Since launching in California in June'22, 100+ patients have signed up and sales have grown by 30% MoM. Anise has signed 4 B2B pilot contracts to date and is contracting with a regional health plan in California with 400k+ members and has gotten in-network with Optum.

# ⊿ anthro

#### **Anthro Energy**

#### Stanford University | 2021 | https://www.anthroenergy.com

Anthro is reimagining the future of energy storage. They are an advanced materials company developing solutions to some of the biggest problems facing the battery-dependent electrified future. Spun out of Stanford University, they've created high-performance batteries with structural integrity and total safety. Today, their customers use their flexible batteries to create advanced wearable electronics and medical devices with unprecedented functionality. Tomorrow, their ruggedized batteries will safely enable an electrified future.

Anthro is proudly supported by world-class investors and a wide range of government grants. They are a group of pioneers, reimagining batteries to create a smarter, cleaner tomorrow.



## Aqdot

### University of Cambridge | 2013, Fifth Place | www.aqdot.com

Aqdot is a Cambridge (UK)-based supramolecular chemistry company with a focus and expertise in developing, licensing and selling novel proprietary products.

The Aqdot Solutions part of the business works in partnership with customers to understand their challenges and develop solutions utilising the unique AqBit technology. This has the team working in areas from air filtering in transportation to delivery of therapeutics for cancer.

In parallel the Aqdot Products part of the company has recently launched its own brands AqStar™ M1 and Oderase to date. Again, working with partners either on a distribution basis, or offering the opportunity to "white label" or develop a market specific formulation.



#### **Arctic Sand**

#### Massachusetts Institute of Technology | 2011 | Acquired

Arctic Sand is a fabless semiconductor company with a high-quality, high-volume and cost-effective supply chain. Its supply chain partners include TSMC and the world's leading players in wafer production, test and packaging technology.

They amassed 15 patents and completed their Series B funding round. The MIT spinout received the Best Venture Award at the National Renewable Energy Laboratory's 24th Industry Growth Forum and was an of EE Times Silicon 60 – Hot Startups to Watch. The company was also a Northeast Regional Cleantech Open Winner. In October 2016, Arctic Sand signed Wikeng as an Asian distributor and released their ARC2CO608 LED Boost for notebooks and tablets. This release will reduce power loss by half.

Japan's Murata Manufacturing acquired Arctic Sand in March 2017. Murata is an existing investor in Arctic Sand, leading a Series B round in 2016.



#### Are You a Human

#### University of Michigan | 2011, Second Place | Acquired

Are You A Human enables any website to be sure they are addressing a real human before serving content, services, or ads. Each day they analyze hundreds of millions of interactions across millions of websites to verify real human users and eliminate bots. Founded in 2010 with offices in Detroit and New York, Are You A Human are the foremost experts in online human behavior.

The company placed second at the 2011 Rice Business Plan Competition and has been featured in PC Magazine, VentureBeat, Rolling Stone, and Forbes and on CBS News (Detroit). The Detroit, Michigan, company counts automakers Chevrolet and Ford among its clients. In March 2016, the company sold their video platform, TruEngage to PK4 Media.

Are You a Human was purchased by Distil Networks in May 2017. Distil Networks is a global leader in bot detection and mitigation headquartered in San Francisco, California.



#### Arovia

#### Rice University | 2016 | www.arovia.io

Arovia makes the technology to enable fully expandable displays.

Their second product, Splay, is coming out later this year Splay is the only collapsible, large and portable display. Specifications are 24.5-inch diagonal image with just 8-inches of depth, 1920 x 1080 high resolution, even in bright light. It wieghs only 2.5 pounds and folds to  $6.3 \times 1.5 \times 7.5$  inches (about the size of a big book). It easily connects to phone, tablet or laptop, has a built-in battery and stereo speakers and expands in seconds. Arovia's display is extremely ruggedized for consumer, military, medical, educational use.



# Ascent Technologies University of Chicago | 2016 | https://www.ascentregtech.com

Ascent is the leading provider of Regulatory Knowledge Automation, transforming knowledge work for compliance teams within financial services. Ascent serves the full range of financial services segments including mortgage lending, consumer protection, consumer lending, banking and credit unions, broker dealers and investment advisors, and money transmitters.

Ascent's coverage includes over 1,000 global regulators including both federaland state-level laws and regulations. Ascent's patented AI and natural language processing technology generates granular obligations that are relevant to specific organizations, enabling them to shift focus to developing proactive, scaleable compliance strategies that makes their businesses more competitive— without the constant worry of accidentally missing an important update or keeping records that will stand up to regulator scrutiny.



## **AssetWatch**

# Formerly Nikola Labs | The Ohio State University | 2015 | http://www.nikola.tech

AssetWatch simplifies predictive maintenance and eliminates unplanned downtime for global manufacturers. A leader in sensor-based reliability solutions, its rapidly deployable, full-service, remote monitoring solution monitors the health of critical manufacturing equipment through a network of wireless vibration sensors while machine learning and certified vibration experts analyze the data and create prescriptive and predictive maintenance alerts so machines can be repaired before failure. A spinout of The Ohio State University, AssetWatch was founded in 2014 and was the first company launched by the Ikove Startup Nursery.

The company currently serves over 100 manufacturing organizations and delivers tens of millions in savings annually to customers by eliminating costly unplanned downtime events.



#### **Astek Diagnostics**

#### University of Maryland, Baltimore County | 2020 | http://www.astekdx.com

Astek Diagnostics is a leading innovator in diagnostic solutions, specializing in rapid antibiotic sensitivity testing. Their mission is to revolutionize the way bacterial infections are diagnosed and treated by providing healthcare professionals with cutting-edge diagnostic tools. The Jiddu benchtop analyzer, Astek's flagship product, incorporates a novel method for antibiotic susceptibility testing (AST) to swiftly detect bacterial infections in urine samples, assess infection severity, and deliver accurate AST results within an hour.

In April 2023, the company announced the successful completion of a pilot study for its novel device, Jiddu. The device is intended to provide rapid, point-of-care diagnosis and antibiotic sensitivity testing for urinary tract infections.

# **A** Astorian

#### **Astorian**

#### Formerly Paragon | Yale University | 2018 | Acquired

Astorian is an online marketplace to organize the \$1.5 trillion spent annually on services, supplies, and utilities for America's buildings. It is being successfully used in over 900 buildings in New York City. The team is currently raising a seed round.

In February 2022, Astorian was acquired by Plentific. Based in London, Plentific is the only end-to-end marketplace SaaS platform that empowers property managers to launch and manage their own fully flexible contractor solution.



#### **Astrolabe Analytics**

## University of Washington | 2019 | www.astrolabe-analytics.com

Astrolabe Analytics provides a software solution for battery companies and their partners. they enable their clients to efficiently use their battery data to make batteries that work better, longer, and more reliably using a suite of cloud computing, data management, and machine learning techniques.

Their initial product automates tedious battery data parsing, visualization, and statistical analysis. future development will focus on their maturing data management and data science toolkit.



#### **ATDynamics**

# Formerly Advanced Transit Enterprises | Dartmouth College | 2006, First Place | Acquired

ATDynamics is the leading global supplier of semi-trailer, rear-drag trailer aerodynamics technology. The company is reducing the fuel consumption and associated greenhouse gas emissions of leading North American trucking fleets by 12 percent. Its TrailerTail® rear-drag aerodynamics technology will deliver over \$20 billion in fuel savings to trucking companies and consumers over the next decade by streamlining the airflow at the back of two million long-haul semitrailers pulled on U.S. and international highways.

ATDynamics was named to the Inc. 500, Inc. magazine's annual list of America's fastest growing private companies in 2013. Based in Hayward, California, ATDynamics won first place at the 2006 Rice Business Plan Competition.

In 2015, ATDynamics was acquired by Stemco, maker of commercial vehicle wheel end, braking and suspension components. Stemco is a subsidiary of EnPro Industries, Inc. EnPro is a leader in sealing products, metal polymer and filament wound bearings, components and service for reciprocating compressors, diesel and dual-fuel engines and other engineered products for use in critical applications by industries worldwide.



#### **Ateios**

#### University of California, San Diego | 2018 | www.ateios.com

Ateios is an Techstars-backed start-up developing a platform technology for manufacturing highly customizable and flexible batteries that can be integrated into electronics manufacturing. This technology can be enabled in flexible electronics such as smart textiles, soft robotics, Internet-of-Things (IoT) devices, and medical/fitness-based wearable patches.

Ateios, Inc. aims to drive innovation to new heights that humanity has not yet seen in the world of conformal energy by changing the key limitation: the rigid battery. Do you want to play a part in this technological innovation? Do you want to push your limits beyond what's possible? Are you motivated to work and learn in a fast paced startup environment? Join Ateios in our vision of enabling every surface with energy.



#### **Auditude**

#### University of California, Los Angeles | 2005, First Place | Acquired

Grand prize winner of the 2005 RBPC, Auditude was the leading video advertising technology and monetization partner for premium content owners and distributors. They maximized the value of video content while decreasing operational cost and ensuring a positive advertising experience for consumers anywhere they view video. Auditude worked with marquee broadcast and professional content companies including Comcast, Major League Baseball and Fox News.

In November 2011, Auditude was acquired by Adobe Systems. Adobe is based in Palo Alto with offices in Chicago, Los Angeles, New York City, and London.



# **Aura Biosciences**

# Massachusetts Institute of Technology | 2008 | www.aurabiosciences.com | Exit, Public Company

Aura Biosciences is developing a new class of therapies to target and destroy cancer cells selectively, while leaving surrounding tissue unharmed – an approach they call molecular surgery. By safely eliminating cancer locally, they can treat early and transform the lives of people with a wide range of cancers that are poorly managed today. Their ad program in ocular melanoma (OM), also known as choroidal or uveal melanoma, is designed to remove cancer cells in the back of the eye as a first-line therapy, while allowing for the potential of preserving patients' vision. The goal is to treat small ocular melanomas potentially long before the disease progresses and metastasizes to the liver, where it almost always is fatal. Development of a first-in-class, non-radioactive treatment option to selectively destroy cancer cells would create the possibility to transform the treatment of this and other cancers where the disease can be detected early.

Cambridge, Massachusetts-based Aura went public through an IPO in November 2022.

# Avanti Metal Company Harvard University | 2006, Seventh Place | Acquired

Avanti Metal produced titanium to sell at one-tenth of the current price, using one-half of the current capital and with one-hundredth of the hazardous waste and pollution of other producers. This lightweight, white metal is used in aircraft, ships, and spacecraft. Avanti's technology is based on Sadoway processes developed by Dr. Donald Sadoway, an expert in electrochemistry at the Massachusetts Institute of Technology. The small startup's early capital was funded through a grant from the MIT Deshpande Center for Technological Innovation.

Avanti Metal Company was sold to an international company specializing in metal production.



# **Avesta76 Therapeutics**

Johns Hopkins University | 2019 | www.avesta76.com

Avesta76 is developing breakthrough cancer therapeutics with the potential to treat all forms of cancer, completely and safely. They are based in Los Angeles, California.



# Avitus Orthopaedics Formerly BOSS Medical | Johns Hopkins University | 2011 | www.avitusortho.com

Avitus Orthopaedics is a medical device company developing novel surgical instruments for minimally invasive tissue harvesting. The Company was founded in 2011 by spine surgeons and biomedical engineers at Johns Hopkins University who sought to develop a superior method for bone graft harvesting.



# BetaGlide/retention.ai Formerly BetaGlide (Kohort.io) | Indian Institute of Technology, Kharagpur |2014 | Acquired

BetaGlide created retention.ai, a mobile app testing platform. The platform allowed other app developers to gather real-time information about their systems usage and app behavior to improve stability and performance. retention.ai's testing platform tracks users uninstalls and events and can measure the marketing efficiency of acquisition channels.

In 2015, BetaGlide was acquired by Inshorts, creator of a content distribution app. The acquisition amount was not disclosed.



#### **BetterLife**

#### Nanyang Technological University | 2019 | www.goblm.com

BetterLife Medical Technology, located in Jiangsu Province, is led by a specialist from the Chinese Recruitment Program of Global Experts. The company was invited by the provincial government's global talent program to set up their headquarters in Jiangsu. With many years of experience in microelectronic medical device in a leading multinational corporation and more than thirty years' working experience in the United States in clinical medicine, satisfying the market demand, engaging in strategic product differentiation and multi-channel business models, the company integrates and optimizes leading biomedical engineering and mobile Internet technologies and owns more than 50 domestic and international patents. Many products are a first in the Chinese market. Adopting both traditional and cutting-edge health cloud big data medical models, the company has developed an advanced mobile tinnitus medical device system, which is in a leading position both domestically and internationally. The mobile tinnitus medical device system enjoys a unique competitive advantage in both domestic and international markets and starts to conquer the Chinese market with an estimated market size of roughly 50 million patients.

BetterLife has Obtained Jiangsu Province Food and Drug Administration Class II medical device production license and permit for market access.



#### **Beyond Silicon**

Arizona State University | 2022 | https://www.beyondsilicon.com/

Beyond Silicon is a U.S. startup developing a perovskite-on-silicon tandem cell that has the potential to surpass the efficiency limit of standard silicon solar cells.

BIG & MINI

#### Big & Mini

The University of Texas at Austin | 2021 | https://bigandmini.org

Founded in April 2020, Big & Mini's mission is to eradicate loneliness. The organization creates beautiful, mutually beneficial, generation-spanning relationships through phone and video calls so help people feel just a little bit more connected even while apart.



## **BioAesthetics**

Tulane University | 2016 | www.bio-aesthetics.com

Durham, North Carolina-based BioAesthetics' mission is to transform lives through advancement in biomaterials.

BioAesthetics was founded by Dr. Nicholas Pashos in 2015 as a spin-out from Tulane University in New Orleans, Louisiana. In 2017 BioAesthetics was accepted into IndieBio, the world's largest biotech accelerator, located in San Francisco, California.

The company is commercializing its inaugural product: a tissue-engineered nipple-areolar complex graft (NACgraft). BioAesthetics is focusing its product pipeline on acellular regenerative grafts for advanced wound and reconstructive care.



#### **BiologicsMD**

#### University of Arkansas | 2010, First Place | www.biologicsmd.com

BiologicsMD<sup>TM</sup> is an early stage therapeutic development company focused on developing highly-targeted treatments for hair loss diseases and conditions, as well as severe bone disorders.

The company is developing a series of recombinant fusion proteins that provide powerful stimulatory effects directly to the target receptors at the point of disease – and do so with sustained therapeutic exposure in either a single dose or very infrequent dosing regimens. The company is working on formulation and delivery vehicles that can accommodate parenteral, local, and topical administration.



#### **BioLum Sciences**

#### Southern Methodist University | 2015 | http://www.biolumsciences.com

BioLum Sciences specializes in bioanalytical chemistry & medical device development for chronic disease. Using a point-of-care, low-cost platform, BioLum's novel technology provides a 'window into the body,' measuring biomarkers found in exhaled breath condensate (EBC) and blood. This proprietary technology allows users to monitor treatment progression in real-time on a desktop computer or mobile device, while also providing researchers & clinicians tools to develop & personalize treatments for chronic respiratory and cardiovascular diseases such as asthma, COPD, hypertension, & heart failure.



#### **BIOMILQ**

#### Duke University | 2020 | https://www.biomilq.com

BIOMILQ is leveraging their patented technology to produce cell-cultured human milk made outside of the body. With much of the nutrition of breast milk and the practicality of formula, BIOMILQ is on a mission to nourish healthier babies, empower parents through choice, and contribute to a healthier planet.

BIOMILQ is headquartered in Durham, North Carolina.



#### **BlackLocus**

#### Carnegie Mellon University | 2011 | Acquired

BlackLocus developed a SaaS (software as a service) price optimization platform, offering powerful and affordable e-commerce competitive pricing analysis to customers ranging from small businesses to those on the Internet Retailer 500.

In 2012, BlackLocus was acquired by Home Depot, a mere 20 months after competing in the 2011 Rice Business Plan Competition. Black Locus has become The Home Depot's Innovation Lab and remains in Austin, Texas.



### **Blip Energy**

#### Northwestern University | 2021 | www.blipenergy.com

Blip Energy is defining a new product category - a smart home battery that works for anyone (affordable, smart, self-install) to provide critical backup power for households, add millions of homes to the smart grid, and supply electric grid managers with data to build a better, smarter grid for us all.

Blip recently completed mHUB hardtech accelerator and have opened their seed round. They are based out of Chicago.



#### **BLUEWAVE Technologies**

Formerly BlueWave Cleaning System & Ivy Creative Labs | University of Florida | 2016 | https://www.mybluewave.com

BLUEWAVE Technologies develops mobile and dry disinfection for patient devices in healthcare that other solutions cannot treat. The company has International patients and is a part of the Morgan Stanley accelerator. The FDA has granted them Class II Device status. They are headquartered in New York.



#### **Bold Move Beverages**

The University of Texas at Austin | 2022, Sixth Place | https://boldmovebeverages.com

Austin-based Bold Move Beverages is an early stage alcohol brand that combines two of the world's most beloved drinks, coffee & whiskey, to create Cold Brooze®. With their two flagship SKU's, Original Black and Vanilla Oat, they aim to energize and socialize a new generation of coffee lovers who want to drink responsibly and live life in excess.



#### **Boomalang**

Vanderbilt University | 2015 | www.boomalang.co

Boomalang is a video platform and team of international language coaches.

They connect high school and university students of Spanish, French, German, Italian, Portuguese and English to native speakers across the world to improve conversational fluency and intercultural competence through live video chat. With subtly guided conversation and peer encouragement, Boomalang simulates a natural language learning experience with a focus on teacher and student-specific interests in a low-anxiety environment. Their mission: "Culturally engage and empower tomorrow's leaders through authentic conversation with native speakers."

In addition to promoting intercultural competence and global citizenship for learners, Boomalang also provides students and young professionals across the world with favorable and flexible employment opportunities. They are based in Nashville, Tennessee.



#### **BrewBike**

# Northwestern University & University of Chicago | 2019, Sixth Place | www.brewbikecoffee.com

BrewBike provides college students coffee in the most convenient way, every day. They serve cold brew coffee at lean retail locations and through wholesale accounts. And by empowering students to launch BrewBike at their schools, they will dominate college campuses across the country, leaving big barriers behind us. They are headquartered in Austin, Texas.



#### **Briteseed**

### Northwestern University | 2013, Second Place | www.briteseed.com

Briteseed is delivering the first hyperspectral imaging technology integrated into laparoscopic and robotic surgical tools. This platform will provide real-time sensing of critical structures to improve safety and outcomes of surgical procedures.

Briteseed is developing a suite of surgical instruments, including advanced energy, stapler, and dissection solutions. This platform will provide dynamic information to surgeons about the presence of hidden structures - think blood vessels, ureters, and nerves - as well as the quality of tissues. Briteseed tools fit seamlessly into surgical workflows to provide critical, actionable information at exactly the right time. Information is displayed onto existing surgical monitors without the need to swap instruments.



#### byteSense

Formerly bruxAway | The University of Texas at Austin | 2021 | https://www.bruxaway.com

Austin-based byteSense has created a smart wearable night guard paired to a software platform that providers users with actionable insights about their bruxism(teeth grinding). And through a mobile app, users can access self help tools and services that will help them take action to help manage their bruxism.



#### C3Nano

#### Stanford University | 2010 | www.c3nano.com

C3 Nano, Inc. is the performance leader in nanowire-based technologies, and conductive inks that transform advanced materials and the smart surface industry. The Company is accelerating the depth of innovation through its electronic materials platform and nanowire-based technology solutions. C3Nano's products are used by global manufacturers of mobile devices, notebook computers, and tablets, consumer electronics, automotive, cleantech and life science applications, enabling electrical conductivity and new functionality upon any surface.

Headquartered in Silicon Valley, C3Nano operates manufacturing, sales, and technical support facilities in the U.S. and throughout Asia.





#### **CalWave**

# University of California, Berkeley | 2015 | http://calwave.org/

CalWave's mission is to provide reliable, cost-effective ocean wave technologies for sustainable energy access.

They're bringing superior power generating technology to market with global reach. Their proprietary wave energy converter technology achieves high performance while surviving storms and extreme conditions.

Wave power is more consistent, predictable, and 20-60 times more energy-dense compared to other forms of renewable energy. CalWave's patented technology converts this energy into electricity, equipping coastal communities with clean, reliable, and cost-effective power while keeping our planet and the health of future generations in mind.

Forbes named CalWave's project lead, Marcus Lehmann, to the 2016 list of 30 Under 30 in Energy. Recently they have secured an additional DOE <u>grant</u> for a grid-connected, commercial scale project, secured a new partnership with National Grid for offshore wind and wave colocation on the US East Coast, signed a MOU with Baker Hughes for offshore renewable power, and <u>completed</u> a 10 month pilot.



### CamGaN

#### University of Cambridge | 2011 | Acquired

A spinout from the Department of Materials Science at the University of Cambridge, CamGaN developed low-cost, gallium nitride white LEDs (light-emitting diodes) for use on standard and readily available silicon substrates.

In 2012, CamGaN was acquired by Plessey, which manufactures semiconductor products used in sensing, measurement, and control applications. The company will produce LEDs based on CamGaN's proprietary GaN-on-silicon technology at its processing facility in Plymouth, England.

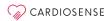


#### **CaptainU**

#### University of Chicago | 2009 | Acquired

aptianU helps millions of athletes compete at the next level. CaptainU was founded in 2008 by Avi Stopper & Michael Farb at the University of Chicago, and has offices in Denver, Colorado and San Francisco, California. The CaptainU platform provides athletic development and recruiting tools for millions of athletes, youth and club teams, events, and college programs.

In December 2016, Captain U was acquired by Blue Star Sports. Based in Frisco, Texas, Blue Star manages youth sports through its platform for youth leagues, clubs, associations, and their national governing entities. As part of the merger, RBPC alumni Avi Stopper and Michael Farb will step into executive roles at Blue Star Sports while continuing in their existing roles as CaptainU's CEO and COO.



#### Cardiosense

#### Northwestern University | 2020, Sixth Place | https://cardiosense.com

Cardiosense is building a physiological waveform data platform that leverages novel multi-modal sensors and industry-leading AI to develop predictive biomarkers for pre-symptomatic disease detection and enable personalized therapy.

Finalists in the 2020 RBPC, Cardiosense is based in Chicago, Illinois.



#### CelluDot

### University of Arkansas | 2020 | http://www.celludot.com/

CelluDot is using agriculture and/or forestry waste today to extract and process nanocellulose for tomorrow's emulsion technology needs without the use of petroleum-derived materials. With many applications in numerous fields and industries, one of their focuses is to provide the herbicide industry as a whole , particularly farmers, with the best solution to control herbicide vapor and particle drift.CelluDot aims to sustainably enhance crop protection and boost agricultural productivity while meeting the demands of the growing world population vis-ávis a decreasing global food supply, without negatively impacting human health and the environment.

With their patent-pending technology, their first commercialization effort is a cost affordable, efficacious, and environmental-friendly adjuvant that addresses the pain incurred by U.S. farmers who face ever-increasing challenges in their daily operations due to herbicide drift.



#### Citrine Informatics

#### Formerly Big Science | Stanford University | 2013 | http://citrine.io

Citrine Informatics is the award-winning materials informatics platform for data-driven materials and chemicals development. It won the 2017 World Materials Forum Start-up Challenge, the 2018 AI Breakthrough award as the "Best AI-based Solution for Manufacturing," and 2020-2021 Cleantech 100 honors. The Citrine Platform combines smart materials data infrastructure and AI, which accelerates development of cutting-edge materials, facilitates product portfolio optimization, and codifies research IP, enabling its reuse and preventing its loss. Citrine's customers include Panasonic, Michelin, LANXESS, and some of the biggest and most respected names in the materials and chemicals industry in Asia, North America, and Europe.

The 1Q 2023 saw 150% sequential quarter growth, powered by long term contracts and rapid penetration within the growing battery industry. Founder and CEO Greg Mulholland was recognized in Forbes' 2015 list of 30 Under 30 in Energy. Citrine is based in Redwood City, California.



#### ClearCam

# The University of Texas at Austin | 2018 | www.clearcam-med.com

ClearCam solves the most common frustration in laparoscopic surgery by providing surgeons with a "laparoscopic windshield wiper" to maintain clear vision during surgery for improved surgical safety and surgical efficiency.

Austin-based ClearCam is closing out a Seed Series 3 raise. They have 18 issued patents to-date, are developing new product lines, and hiring in engineering and sales.



# ClearCount Medical Solutions

# Formerly SurgiCounter | Carnegie Mellon University | 2004, First Place | Acquired

Pittsburgh-based ClearCount Medical Solutions developed a radiofrequency identification (RFID) tracking system for the surgical operating room. They assembled an extendable RFID-based platform to improve efficiency while preventing medical errors. ClearCount's SmartSponge and SmartWand-DTX systems are the only RFID-enabled systems for counting and detecting surgical sponges.

ClearCount's technology was recognized by Popular Science as one of the top 100 innovations of 2009. It received both The Wall Street Journal Technology Innovation Award and the International Design Excellence Award. They won the 2004 RBPC.

In 2014, ClearCount was acquired. Details concerning the sale have been kept confidential.



# CoPilot

# Formerly Delta Band | Carnegie Mellon University | 2019 | https://mycopilot.com/deltatrainer

The CoPilot system empowers you to succeed in health and wellness by combining human coaches with simple habit building strategies. The greatest things in life are achieved together. At CoPilot, they know that it takes more than apps and bots. They'll team you up with a human coach to receive hands-on support for your lifestyle. Your hand-picked coach is always there to celebrate successes and overcome obstacles. With CoPilot by your side, you never have to go it alone.

The Pittsburgh-based company has been recognized by Forbes as the #1 training app in the world.



#### Corlnnova

#### Texas A&M University | 2005 | www.corinnova.com

Houston-based CorInnova is developing a non-blood contacting biventricular cardiac assist device for the treatment of acute heart failure that would eliminate many adverse events associated with existing cardiac assist devices due to blood contact.

The device, initially for the fast-growing short-term cardiac assist market (up to 7 days' use), will expand addressable market to \$6B+. The self-expanding, pneumatically driven device consists of collapsible thin-film polyurethane chambers with a nitinol wire frame that deploys within the pericardial sac and surrounds both ventricles. The device gently compresses the heart to increase output using a pneumatic driver that operates in synchrony with the heartbeat.



#### **Crystal Sonic**

#### Arizona State University | 2019 | www.xtalsonic.com

Transforming semiconductor manufacturing by harnessing the power of sound. Founded in 2018 and based in Phoenix, Arizona, Crystal Sonic is a hard-tech start-up focused on reducing cost and waste for next generation semiconductor manufacturing. Their patented technology originates from Professor Mariana Bertoni's laboratory at Arizona State University.In January, Crystal Sonic was awarded a SBIR Phase 1 award and chosen to participate in the inaugural NASA SBIR Ignite program.



#### Curiva

# Formerly dermadiagnostics | University of Notre Dame | 2019 | http://www.curiva.co/

Curiva is committed to reducing the incidence of cervical cancer by delivering faster, more accurate results through a non-invasive diagnostic patch. Their patient-centric products deliver accurate, same-day results while reducing diagnostic costs for healthcare providers. A microneedles mediated diagnostic patch, diaPatch™, that detects the early onset of cervical cancer, replacing invasive procedures such as the Pap smear and colposcopy. The digitized medical device is able to detect novel targets within 30 min. - equivalent to a clinical visit. Overall, diaPatch™ will provide benefits to healthcare professionals for better management of guidelines and improved patient outcomes.

Curiva is headquartered in Goshen, Indiana and has been in operation for 2 years.



# cycleWood Solutions Formerly cycleWood Plastics | University of Arkansas | 2011, Fourth Place | Acquired

Using their patented technology, cycleWood Solutions modified lignin, an abundant, natural byproduct of the paper manufacturing process, and blended it with other compostable polymers to create their signature product, the Xylobag<sup>TM</sup>.

The cycleWood technology was sold to CAPCOR in 2016.

# **CytexOrtho**

# CytexOrtho Formerly Cytex Therapeutics | Duke University | 2006, Sixth Place | https://cytexortho.com/

CytexOrtho was formed to develop and commercialize the tissue regeneration technology discoveries coming out of the lab of Dr. Farshid Guilak at Duke University. The original Cytex business plan received numerous innovation awards, including seed capital for the startup phase. Since its founding, Cytex has gone on to win numerous state and federal grants, each recognizing the novelty of the research and its enormous potential contribution to the clinical management of patients with osteoarthritis. The three Cytex co-founders form the core leadership of the company as it continues to develop its novel products.

In January 2023, they announced a Breakthrough Device Designation from the United States Food and Drug Administration (FDA) for their novel hip cartilage repair technology.



# D-Orbit Santa Clara University | 2010 | www.dorbit.space

D-Orbit is a global market leader in the space logistics and transportation service industries with a track record of space-proven technologies and successful missions. The company has developed proprietary space logistics technology and transportation solutions to accelerate the growth and development of a trillion-dollar space economy through an incremental strategic approach to the space marketplace to deliver successful customer outcomes today while developing advanced products and services for the needs of tomorrow.

Based in Italy, D-Orbit was founded in 2011. With a manifest of future missions fully booked by new and returning customers, the company has already successfully flown over 70 payloads. D-Orbit is the first company to address the logistics needs of the space market. Its forward-thinking view has enabled it to consistently create solutions for its customers that save them money and time, like ION Satellite Carrier, a vehicle that can transport satellites in orbit and release them individually into distinct orbital slots, and a proprietary cloud-based mission control software suite designed to control entire satellite constellations.

As it looks to the future, D-Orbit is already developing and testing new technologies to extend the life of satellites in orbit, perform active debris removal, enable interplanetary space logistics, and more.



#### **D&P Bioinnovations**

#### Tulane University | 2016 | www.dpbioinnovations.com

D&P Bioinnovations is a regenerative medicine company focused on repairing damaged organs with engineered biomaterials and stem cells. The company has developed a platform absorbable immunomodulatory medical device implant to regenerate damaged organs: gastro-intestine, blood vessels, nerves, tendons/ligaments, and muscle. This platform technology can address the global regenerative medicine market that is expected to accrue over \$110 billion by the mid 2020s. However, D&P's first therapeutic indication is developing an implantable, bioresorbable medical device to regenerate a damaged esophagus (organ providing food to the stomach).

D&P Bionnovations is based in San Diego, California.



#### Datafiniti

#### Formerly 80legs | Rice University | 2009, Sixth Place | http://datafiniti.net

There are billions of web sites on the Internet. Those web sites contain trillions of points of information. All of that information is potential data. Data on businesses, products, homes, people, and much more. All of that data can be used for a wide variety of business applications like lead generation, pricing intelligence, competitive analysis, and much more.

The problem is that web data is very hard to access for businesses. Businesses must go through a complicated and expensive process of acquiring, cleaning, bundling, and distributing web data before they can consume it. Datafiniti simplifies all of these steps into a single step of accessing their API.

Datafiniti's promise is to take the entire Internet, and using their proprietary technology, transform it into a single database that all businesses can use to access the web data they need.

In other words, Datafiniti is instant access to web data. They're based in Austin.



#### **DATTUS**

#### Formerly Bearing Analytics | Purdue University | 2013 | Acquired

DATTUS provided a platform (hardware + software) to make industrial machinery "smarter" and helps industrial facilities compete in the rapidly evolving industrial environment through data-driven intelligent decision making. DATTUS' customers included Faurecia and Wabash National. Dattus Founder Anurag Garg was recognized on Forbes 30 Under 30 in 2017 (Manufacturing & Industry).

The company was acquired by Plex Systems of Troy, Michigan in July 2018. Plex is the Manufacturing Cloud, delivering industry-leading ERP and manufacturing automation to nearly 600 companies across process and discrete industries.



#### **DexMat**

#### Rice University | 2015, Fifth Place | www.dexmat.com

DexMat is a climate tech moonshot company that believes carbon is the problem — and the solution. That's because their flagship material, Galvorn, is made entirely of carbon! They transform hydrocarbons, renewable fuels, and captured carbon into a Space Age material that vastly outperforms traditional alternatives like steel, aluminum, and copper. It's the promise of science fiction made into reality, thanks to research by Professor Matteo Pasquali and his team at Rice University — refined and commercialized with support from Shell Ventures, Aramco Ventures, the U.S. Department of Energy, NASA, the National Science Foundation (NSF), the United States Air Force, ARPA-E, and others. When adopted at scale across industries such as power, aviation, and automotive, Galvorn represents a multi-gigaton carbon reduction impact by creating the building blocks necessary for a cleaner economy.

Forbes named co-founders Dmitri Tsentalovich and Francesca Mirri to their 2016 list of 30 Under 30 in Manufacturing and Industry. DexMat was awarded Phase II SBIR grants from both NASA and the U.S. Air Force. The Houston-based company placed fifth overall in the 2015 RBPC.



# **Difinity Solutions**

University of Manitoba | 2022 | https://www.difinity.ca/

Difinity Solutions specializes in the development and commercialization of medical devices and technology solutions. Their current pipeline products focuses on an innovative new way to deliver medications more quickly and safely in emergency situations. They are based in Ontario, Canada.



# Divert

# Formerly FEED Resource Recovery | Babson College | 2007, Sixth Place | Acquired

Divert was founded in 2007 by Ryan Begin, CEO, and Nick Whitman, COO, to make social and environmental impact by creating advanced technology and sustainable infrastructure to prevent wasted food. Today, more than 5,200 stores across the United States, from 5 of the Fortune 100 companies, utilize Divert's technology to reduce and repurpose food waste. In 2021, Divert added over 1,500 retail stores, grew their customer base by 40 percent and processed 210k tons of food.

In 2021, Divert was acquired by Ara Partners and entered into a billion dollar infrastructure agreement with Enbridge.



#### **DMF Medical**

#### Formerly Purisorb | Dalhousie University | 2011 | https://memsorb.com

DMF Medical Incorporated is a Canadian-based corporation founded in 2011. Their team develops technologies to support the delivery of safe, sustainable, and cost-effective anesthesia. They are grounded in the belief that meaningful research and product development leads to improved clinical practice and outcomes.

Their lead product – memsorb $^{TM}$  – is the next-generation solution for CO2 removal in anesthesia circuits.

# drivemate

#### **Drivemate**

### Ohio University | 2020 | https://www.drivemate.asia

Drivemate is peer to peer car sharing platform that allows you to rent a car directly from the car owner. The car owners can make money from their idle cars. In Drivemate they have more than 100 unique makes and 3,500+ vehicles available. Drivemate has more than 100,000 users in their community.

Drivemate has raised a series A from top name investors such as 500 Startups, Netsol Inc, Isuzu UNT, Colopl Next. They are looking for more fund to expand in Asia pacific and Oceania. They are based in Bangkok, Thailand.



#### **Droice Labs**

#### Columbia University | 2017, Fifth Place | www.droicelabs.com

Droice Hawk is an Al-based middleware software that ingests messy, noisy, real-world patient data (e.g., EMRs, labs, claims, etc.), including the free text/unstructured content, and generates analysis-ready data consumed in novel clinical and research use cases.

The company was named one of the Ten Most Promising companies at the 2020 Texas Life Science Forum. They placed fifth place at the 2017 RBPC and are headquartered in New York, New York.



#### **Dynamics**

# Carnegie Mellon University | 2009, First Place | www.dynamicsinc.com

Dynamics Inc. produces flexible electronics, air safety systems, and asset management systems. Dynamics has raised over \$110 million dollars in funding from investors including Mastercard, CIBC, Adams Capital Management, and Bain Capital Ventures.

Dynamics launched the IndusInd Nexxt payment card in 2018, which won India's Product of the Year. CollectForever.com launched at San Diego Comic Con 2022 and CollectForever.com runs on the Dynamics platform. Headquartered in Pittsburgh, Pennsylvania, Dynamics won the 2009 Rice Business Plan Competition.

EARLY INTERVENTION SYSTEMS

# Early Intervention Systems The George Washington University | 2021 | https://earlyinterventionsystems.weebly.com/

New Jersey-based Early Intervention Systems is a healthcare startup that has devised a system that can predict early stage patient agitation. When a patient gets agitated, he or she poses a risk to medical staff, other patients, as well as themselves. By providing fast, accurate and reproducible information, we can tangibly measure and scale well-being for every resident or patient to ensure a positive experience with the highest quality of care. Hence, improving the overall well-being of elders and the safety of their caregivers.

Currently, the team is part of the Techstars Chicago Accelerator cohort.



#### **EarthEn**

#### Arizona State University | 2022 | https://www.earthen.energy/

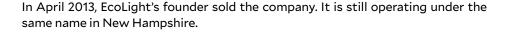
EarthEn is developing flexible & future-proof long duration energy storage solutions that use CO2 in a closed loop to store 4-100+ hours of energy at a low cost & highly scalable manner.

Their SaaS tools leverage AI/ML & their storage assets to optimize peak demand pricing & use predictive analysis to enable grid resiliency by ensuring their storage assets come online to prevent grid power loss. Their novel thermo-mechanical storage solution is patented and we're working with agencies like EPRI & strategic national labs to scale their systems up in EPRI's Charlotte, NC labs later this year. Their storage solutions blow current storage solutions out of the water across dimensions like cost, scalability, flexibility, future potential, carbon sequestration, size & safety.

#### **EcoLight**

#### Formerly Cirquility/House | Dartmouth College | 2012 | Acquired

EcoLight installed and managed energy efficient systems for residential and commercial businesses. In partnership with Dartmouth College, EcoLight installed energy efficient systems in the Thayer School of Engineering. After competing in the 2012 Rice Business Plan Competition as House Inc., the founders reorganized, first as Cirquility, then as EcoLight.





# Educational Vision Technologies University of California, San Diego | 2020 | http://evt.ai

Educational Vision Technologies (EVT) autonomously generates online classes and study material that enables students to excel academically and save universities money. By autonomously generating notes they give independence to the 70 percent of students with disabilities who rely on university provided notetakers.

EVT is based in La Jolla, California.



#### **EEme**

#### Carnegie Mellon University | 2013 | Acquired

EEme was an energy analytics company providing a scalable machine learning platform that converts raw smart meter data into appliance-level and equipment-level insights using proprietary algorithms. It provided demand-side management stakeholders with appliance-level insights leveraging existing smart meter data and without relying on new hardware investments or user intervention.

In January 2019, EEme was acquired by Tendril, the leading provider of Home Energy Management solutions to the utility industry. Details of the sale were not disclosed.



# Elegus Technologies University of Michigan | 2015 | Acquired

Elegus Technologies developed and commercialized nanotechnology enabling safer, longer-lasting batteries. Their aramid-based, ultra-strong battery separator made from high-performance nanoscale fibers was developed at the University of Michigan. They had significant support from the University of Michigan, MEDC, and the National Science Foundation I-Corps program.

In 2021, Elegus Technologies was aquired by Soteria Battery Innovation Group out of Greenville, South Carolina.



#### **Elemental Enzymes**

Spogen Biotech (dba Elemental Enzymes) | University of Missouri | 2012 | http://www.elementalenzymes.com

Elemental Enzymes brings innovative, cross-disciplinary scientific solutions to complex problems impacting commercial agriculture. Using sustainable enzymes, peptides and biochemistries, they are improving plant and soil health, performance, and yield.

Elemental Enzymes is based in Columbia, Missouri.



#### Elevate K-12

#### Elevate Learning | University of Michigan | 2007 | http://elevatek12.com/

Elevate K-12 is a Chicago-based instructional services company that brings high-quality live streamed instruction into K-12 classrooms. Schools and districts partner with Elevate K-12's unique instructional solution to solve their teacher shortage challenges and overuse of long-term substitutes or low-quality teachers. Its tech-enabled service comprises Proprietary Live Instructional Management Technology, Live Instruction Service, Curriculum and Classroom Management to provide the necessary tools for collaborative teaching and learning that emulates the experience of a real, physical classroom. Elevate K-12 currently operates in 27 states and is rapidly expanding to new states and districts across the U.S. in K-12 schools.

In June 2022, Elevate K-12 closed their Series C. The funding will support Elevate K-12 in its mission to solve the ongoing teacher-shortage crisis by scaling its live stream instruction model to more schools and districts that lack teachers in critical content areas due to zip code barriers

#### **ElevateU**

#### Arizona State University | 2021 | http://www.elevateu.ai/

ElevateU empowers educators to turn rigid content into engaging learning experiences that replace the need for any archaic textbooks.

Phoenix, Arizona-based ElevateU enables professors to create and utilize turnkey learning experiences that are fully customizable and integratable with all of their existing material. By combining expert content with an adaptable learning platform, students are now able to be delivered a higher quality education at a lower cost.

Encapsulate LLC

#### **Encapsulate**

#### University of Connecticut | 2020 | www.encapsulate.bio

Encapsulate is an automated tumor-on-chip system that grows patients' cancer cells ex vivo & tests the efficacy of chemotherapy drugs. The company was selected as the "Scalable Venture" in the Entrepreneur of the Year ceremony of CT Entrepreneurship Award in 2021. They are headquartered in Farmington, Connecticut



#### **EnKoat**

#### Arizona State University | 2019 | www.enkoat.com

EnKoat is an advanced materials company headquartered in Phoenix, Arizona. EnKoat's mission is to reduce building owner's operating expenses by transforming traditional building products into advanced thermal management solutions to address a \$400 billion heating and cooling problem. In July 2022, EnKoat joined the first Net-Zero cohort of Upward Labs.



#### **EpiSLS**

#### University of Michigan | 2022 | https://episls.com

EpiSLS is a novel medical device enabling rapid, reliable, and accessible point of care allergy testing. EpiSLS uses novel application and sensing technology to automate the same high-fidelity testing protocol of the current gold-standard inoffice skin prick testing. EpiSLS's sophisticated technology allows it to outperform skin prick testing by reducing error, performing tests faster, and making allergy testing accessible to patients even in remote and low-resource settings.

They won second place at the Heartland Challenge 2022 and were finalists at both ASU IO and the Collegiate Inventors Competition. The company is based in Ann Arbor, Michigan.

#### **EPISTEMIX**

#### **Epistemix**

#### Formerly FRED | University of Pittsburgh | 2018 | https://www.epistemix.com/

Epistemix empowers leaders to make better decisions by simulating how diseases, ideas, and behavior spread through communities. They leverage decades of epidemiological experience, diverse datasets, and scientific best-practice to build computational models that forecast the health impacts of policy interventions so that organizations can take informed action. They are currently working with companies, event organizers, school districts, and state governments across the United States to evaluate opening strategies and gauge COVID-19 response.

Their product for the events industry has helped bring back hundreds of events and millions of dollars in economic growth. In 2022, Epistemix launched a nationwide product for the education market that enables school boards to forecast health outcomes for students and teachers.

# ess<sub>D°</sub>cs

### essDOCS

# Formerly Electronic Shipping Solutions & eShipping Solutions | University of Pennsylvania | 2004, Seventh Place | Acquired

essDOCS' mission is to enable paperless global trade management. Their CargoDocs platform digitizes, automates, and accelerates trade operations, finance, logistics, compliance, and visibility. Their essCert platform digitizes the certification of preferential & non-preferential certificates of origin and other export/import-related documents issued by Chambers of Commerce or other Authorizing Bodies. 65,000+ companies, ranging from 31% of the Fortune Global 100 to innovative SMEs, plus 400+ Chambers of Commerce, use their solutions globally in warehouses as well as bulker, tanker, container and barge movements. They also partner with commodity exchanges, digital trade partners and industry consortia delivering post-trade and/or trade finance solutions. Customers are supported from their offices in London, Athens, Galway, New York, Shanghai, Kolkata, Adelaide and Singapore.

In 2022, essDOCS was acquired by the Intercontinental Exchange (ICE).





#### **FARAPULSE**

#### Formerly IOWA Approach | The University of Iowa | 2014 | Acquired

Designed for catheter-based artrial fibrillation, the Farapulse PFA system, which includes Farawave, Farastar and Faradrive, received CE mark approval in January 2021 and is commercially available across Europe.

Boston Scientific acquired Farapulse in August 2021.



# FibreCoat RWTH Aachen University | 2021, Third Place | https://www.fibrecoat.de

FibreCoat makes high-performance materials affordable. With their beachhead product AluCoat, they serve the automotive, construction and defence industry helping to solve their shielding, cooling and heating needs at a low cost.

FibreCoat has set up new productions lines in Georgia (Country) and Poland. Furthermore, a new type of AluCoat was introduced to markets: chopped fibres that can be used in plastics processing for compounding and injection moulding. This new material will be used to create thermally and electrically conductive plastics to be used in automotive and electronics applications.

FibreCoat has set up new productions lines in Georgia (the country) and Poland. Furthermore, a new type of AluCoat was introduced to markets: chopped fibres that can be used in plastics processing for compounding and injection moulding. This new material will be used to create thermally and electrically conductive plastics to be used in automotive and electronics applications.

The Aachen, Germany-based company placed third in the 2021 RBPC.



#### Flat Medical

#### National Taiwan University | 2016 | www.flatmedical.com

Flat Medical is a MedTech company that focuses on safety solutions for clinical procedures. Supported by key opinion leaders and venture capitalists in the United States, Europe, and Asia, the company is commercializing and developing various applications for its innovative EpiFaith® tech.

They are based in Taiwan.

# FloVision Solutions Formerly FloWaste | University of Notre Dame | 2021 | https://flovisionsolutions.com

Headquarted in South Bend, Indiana, FloVision Solutions reduces waste and increases food yield for food processors and providers by integrating compact sensors that automatically measure food performance, defects, process errors, and lost yield.

Increase food yield, quality, and accountability. Automatically. In August 2022, the team was selected to take part in Sustainability Subscribed, an accelerator program.

#### Flux Hybrids

#### NC State University | 2021 | www.fluxhybrids.com

Flux Hybrids was founded in 2019 by five engineers from North Carolina State University. Flux Hybrids develops plug-in hybrid powertrains that can easily turn any vehicle into a clean and efficient vehicle.

Their technology provides a significant increase in fuel economy and reduction in fuel expenses for vehicle owners and also integrates seamlessly into your vehicle's drivetrain, greatly reducing its carbon footprint. Flux Hybrids also works with many other companies ranging from auto dealerships to public transportation.

Currently Flux Hybrids is part of the Techstars Alabama Power EnergyTech cohort. They are headquartered in Raleight, North Carolina.



# Flux Marine Boston University | 2019 | www.fluxmarine.com

Flux Marine is seeking to accelerate the electrification of the marine industry.

Their product offering gives both new and seasoned boaters the opportunity to maximize performance and gain the full benefits of electrification while engaging in a sustainable, quiet, and low maintenance boating experience. Their electric outboard motors have been re-designed from the ground up without using legacy combustion engine parts.

The Flux team is made up of tinkerers, 'out-of-the-box' thinkers, and driven individuals who are passionate about pushing the boundaries of sustainable technology for the betterment of their customers and the world. They are based in Bristol, Rhode Island.



#### **Forest Devices**

#### Carnegie Mellon University | 2017, First Place | www.forestdevices.com

Based in Pittsburgh, Pennsylvania, Forest Devices is developing AlphaStroke (AS), the first stroke screening device that can be used by all medical personnel in any environment.

Durable, portable, and easy to use, AS alerts users to possible strokes within minutes. By triaging of stroke and stroke negative patients to the correct level of care, AS dramatically reduces the average delay of 110 minutes that 50 percent of stroke patients experience. This minimizes time-to-treatment, the critical factor in improving stroke patient outcomes. Forest Devices won the grand prize at the 2017 RBPC.



# Formally Brown University | 2019 | www.formally.us

Formally is a legal tech company with a mission to increase access to justice. Their platform leverages intelligent technology and accessible design to streamline and simplify complex legal processes. Their most recent product helps users complete an immigration application, a process that usually takes weeks, in under an hour and get it reviewed by an experienced attorney in under 24 hours. Formally is building a new legal experience that is cost-effective, convenient, and secure.

They are based in Providence, Rhode Island.



# Four Growers University of Pittsburgh | 2018 | https://fourgrowers.co/

Pittsburgh-based Four Growers was founded to provide healthy, affordable, local produce by reducing the production costs of greenhouse growers through robotics technology. They are positioning themselves to be the automated solutions provider for greenhouse crop management.

They are working closely with various greenhouse growers to develop a tomato harvesting robot. Their technology relies on two layers of protection, patents filed protecting the physical design of the robot and a proprietary algorithm that controls the robot's decision making. Their solution is not only capable of harvesting the tomatoes, but also of performing a quality check and of packaging.



# Fruitdee Formerly AGcerez | Chulalongkorn University | 2013 | https://www.fruitdee.com/

Fruitdee is a supplier and exporter of frozen Thai fruit, e.g. frozen durian, coconut, and mango.

Fruitdee has been catching up with rising demand in durian bakery products and coconut water boom in China. The company is launching new product UHT coconut milk drink in 2023 and is discussing a joint venture with a Chinese partner.

They are based in Bangkok, Thailand.



# Gecko Robotics Carnegie Mellon University | 2016, Third Place | http://www.geckorobotics.com

Gecko Robotics performs robotic inspections for energy and cogeneration plants across the United States. They build and operate robots to perform inspections on industrial equipment, specifically coal, biomass, natural gas and recovery boilers as well as storage tanks and piping.

Gecko's robots eliminate dangerous working conditions by removing humans from confined and inaccessible places. Inspections are completed in a fraction of the time and cost compared with traditional methods. Inspected areas are evaluated in real-time with best practice inspection methods such as ultrasound, magnetic induction and visual, enabling plant managers to quickly know where and how to make targeted repairs. Their customer list has over a hundred companies from the infrastructure, power, and energy industries including Dow Chemical, Marathon, Shell, and Chevron.

Gecko Robotics placed third at the 2016 RBPC. Most recently, Gecko signed an 18 month agreement with the U.S. Air Force to survey aging U.S. nuclear missile silos. They are also expanding their work with the U.S. Navy. Gecko signed an 18 month agreement with the U.S. Air Force to survey aging U.S. nuclear missile silos.



# **Hazel Technologies**

#### Northwestern University | 2016 | www.hazeltechnologies.com

Hazel Technologies is a USDA-supported company based in Chicago, Illinois. The company helps growers, packers, and shippers of produce extend the shelf-life of their fruits and vegetables, which reduces produce rejections, can extend seasonal availability, and expand geographic markets. Hazel Technologies develops products in the form of packaging inserts that slow ripening of produce due to ethylene and use a blend of essential oils to reduce to inhibit microbial growth.

In 2020, Hazel Technologies expanded their international footprint and entered into a number of new partnerships with domestic growers.



#### Heart I/O

#### University of Pittsburgh | 2019 | www.heartio.ai

HEARTio is a digital diagnostics startup using Arificial Intelligence paired with the Electrocardiogram to improve cardiovascular diagnostics through lower costs, quicker diagnoses, and greater testing accuracy.

In November 2020, the FDA granted 'breakthrough designation' to HEARTio's flagship product. The Breakthrough Devices Program accelerates development, assessment, and review of new medical devices, while preserving the statutory standards for premarket approval, 510(k) clearance, and De Novo marketing authorization. Heart I/) launched and is near completion of a large scale (~17K patients) validation study. They recently closed a their seed round and are based in Pittsburgh, Pennsylvania.



# Helix Steel Formerly Torx International & Polytorx | Georgia Institute of Technology | 2003 | | Acquired

Helix is a steel fiber additive used in varying dosages to reinforce construction concrete. It replaces rebar in concrete. Subjected to more than 10,000 tests both in laboratories and in the field, Helix has been proven to meet or exceed rebar performance in every application of concrete.

Originally designed at the University of Michigan for applications in earthquake and blast resistance, Helix is now used in a broad spectrum of projects ranging from commercial to infrastructure, residential to heavy industrial, shotcrete to precast.

In February 2016, Helix Steel was chosen for New York City's Metro Transit Authority's East Side Access Project. Helix is reinforcing the tunnels that connect Long Island to Manhattan's Grand Central Station. It is the biggest transportation project in the nation and the first expansion of the Long Island Railroad in more than 100 years. The company has garnered major entrepreneurial awards, and it was featured on ABC's Extreme Makeover: Home Edition. Helix was used to rebuild homes in Joplin, Missouri destroyed by the 2011 tornado. In the past year, the company has filed new patents and received ISO 9001-2015 accreditation.

Helix Steel was acquired by their leading investor, Pensmore Reinforcement Technologies in January 2017. RBPC alumnus and founder Luke Pinkerton will remain CTO of Helix Steel.



# Hoth Intelligence Thomas Jefferson University |2022, Second Place |

Hoth Intelligence envision a world where medical providers operate at the highest level. In our world, precision medicine is not the goal – but the standard. Every patient, every provider, and everyone around them, only receives the best care possible. At Hoth, they are building just that. They create augmented reality software, coupled with machine learning and artificial intelligence, to reduce medical errors.

**HOUR \* WORK** 

# HourWork

Formerly SYRG & Aday Technologies | Harvard Business School | 2018, Third Place | www.hourwork.com

HourWork offers a new, better way to hire and retain hourly workers in today's understaffed world. Its recruitment and retention platform is used by more than 6,000 quick-service restaurant franchises across the United States. In 2022, they raised an oversubscribed Series A.

#### **Hubly Surgical**

Johns Hopkins University | 2021 | http://www.hublysurgical.com/

Their mission is to improve patient outcomes and quality of care for surgical procedures, inclusively, across standard and underserved settings. Hubly Surgical's key objective today is for their safety technology (RESEARCH DEVICE; NOT FDA CLEARED FOR SALE) to become the standard of care for all medical drilling across craniotomy and osteotomy. FDA 510(k) pending.



# Husk Power Systems University of Virginia | 2008 | www.huskpowersystems.com

Husk is one of the world's leading distributed utilities. Founded in 2008, the company provides reliable power to rural communities and businesses, entirely from renewable energy sources – 24 hours a day, 7 days a week – at a price they can afford. It offers customers a flexible "pay-as-you-go" energy service, using a mobile-enabled smart metering system. It provides low-cost energy that matches the growing needs of their customers; for households, community services and productive uses. Its grid-compatible solution can be rolled out quickly and cost-effectively to support national electrification plans.

In 1Q 2023, they became the first profitable minigrid company in Africa and Asia.



# Hyliion

Carnegie Mellon University | 2015, Third Place | http://www.hyliion.com | Exit, Public Company

Hyliion is the market-ready electrified powertrain solutions provider for the commercial transportation industry. They combine best-in-class electrified powertrain technology with advanced software capabilities and leverage existing alternative fuel infrastructure to deliver immediate value and fastest path to market without sacrificing performance and reliability. Hyliion eliminates the barriers to reducing both total cost of ownership and emissions for fleets, improves quality of life and earnings potential for truck drivers on the road and empowers consumer brands to immediately pursue sustainability and emissions reduction milestones in their supply chains. Their products are purpose built and practically designed to enable the commercial transportation industry to achieve net-carbon-negative emissions in the global effort to fight climate change. They placed third in the 2015 Rice Business Plan Competition.

In October 2020, Hyliion merged with Tortoise Acquisition Corp., a publicly traded special purpose acquisition company. The combined entity was named Hyliion Holdings Corp. and is traded on the New York Stock Exchange (NYSE) under the ticker symbol "HYLN." Hyliion will use the proceeds from the merger to develop and commercialize its Hybrid and Hypertruck ERX electrified powertrain solutions.



#### Iconic Air

#### West Virginia University | 2020 | www.iconicair.io

Over the past five years, the leak detection and repair market has seen a rapid advancement in hardware innovation. Current emissions software leaders are antiquated and lack the capability of processing data from these new systems now being implemented. Iconic Air is a Saas platform that automates the data analytics process for these cutting-edge devices and provides insight on asset risk and performance.

In 2020, Iconic Air joined the Austin Technology Incubator and received an Air Force Phase II Small Business Innovation Research (SBIR) contract. They are headquartered in Morgantown, West Virginia.

# imagine () ptix

# **ImagineOptix**

#### The University of North Carolina at Chapel Hill | 2007, Fourth Place | Acquired

ImagineOptix creates innovative solutions for optical and opto-electronics challenges in displays, telecommunications, imaging, optical storage, and spectroscopy. In collaboration with organizations across a wide range of industries, ImagineOptix applies proprietary technologies to control and capitalize on the properties of light in unexpected ways, resulting in dramatic improvements to optical efficiency and performance. Its patented thin-film wavefront and spectrum control technologies have been successfully applied to imaging systems, telecom switches and liquid crystal displays. They have enabled the world's smallest, most battery-efficient projectors.

Since signing its first major development contract in 2012, the company has grown rapidly and now counts many FORTUNE 500 businesses among its customers. With their impressive array of almost 60 patents and pending patent applications, ImagineOptix is one of North Carolina State University's Fast 15 startups. The company placed fourth in the 2007 Rice Business Plan Competition.

Meta (Facebook) acquired ImagineOptix in December 2021.



# **Immersed Games**

#### University of Florida | 2015 | http://www.immersedgames.com

Immersed Games is harnessing the engaging power of video games to create a hands-on experiential learning platform.

Their flagship product, Tyto Online (www.tytoonline.com), is a video game for middle school students to learn science content and skills — designed for the new science standards that are being implemented across the country. The student experience includes activities like building complex ecosystems from scratch to learn ecology or working with a botanist to solve a food shortage as they learn genetics.

They have received grants from the Dept. of Education and NSF (actively on a Phase II), and were purchased by educational agencies for over 4,000 students this school year. Immersed Games is based in Buffalo, New York.

#### **ImmunoACT**

Formerly Immunoadoptive Cell Therapy | Indian Institute of Technology, Bombay | 2020 | http://www.immunoact.com/

ImmunoACT is a pioneer in India's first indigenous CAR-T cell therapy. In 2Q 2022, the company completed their phase 1 clinical trials of chimeric antigen receptor (CAR) T-cell therapy to treat Leukaemia and Lymphoma.



#### Impel NeuroPharma

University of Washington | 2009 | www.impelneuropharma.com | Exit, Public Company

Impel NeuroPharma is a privately held, Seattle-based biotechnology company devoted to creating life-changing, innovative therapies for central nervous system (CNS) diseases. Impel NeuroPharma is currently investigating INP104 (POD-DHE) for acute migraine headache, INP103 (POD-levodopa) for reversal of OFF episodes in Parkinson's disease and INP105 (POD-olanzapine) for acute agitation in schizophrenia and bipolar disorders. Impel's products utilize its novel, nasal drugdelivery Precision Olfactory Delivery, or POD<sup>TM</sup>, device technology to deliver liquid or dry powder forms of drug to the upper nasal cavity in a consistent and predictable manner.

Based in Seattle, Washington, Impel NeuroPharma is supported by top pharmaceutical companies, the U.S. Department of Defense, Washington's Life Sciences Discovery Fund, the National Institutes of Health, and the Wings medical device network.



On September 9, 2021, Impel NeuroPharma announced pricing for their IPO.

#### Inanovate

Babson College | 2005 | www.inanovate.com

Inanovate is a medical device-diagnostics company headquartered in Sioux Falls, South Dakota with engineering and device production operation in Chapel Hill, North Carolina. Inanovate has developed a breakthrough proteomics platform technology (Bio-ID800/LAS) with an initial diagnostic test application focused on tick born disease. Lyme disease has increasingly become a significant health problem, with early and accurate diagnosis continuing to be a challenge. The Inanovate diagnostic test aims to become a one-stop shop for diagnosis and treatment monitoring.

The company has been awarded government grants through the National Institute of Cancer and the United Kingdom's Technology Strategy Board and are partnering with Sanford Research. They are based in Sioux Falls, South Dakota.

Incept & BioSystems

#### **Incept BioSystems**

#### University of Michigan | 2005, Third Place | Acquired

Incept BioSystems developed innovative, microscale technologies to provide fertility specialists with breakthrough capabilities. Its technology improved in vitro manipulation, performance, and viability of high value cells. Incept's System for Microfluidic Assisted Reproductive Technology (SMART) platform was the first to deliver unique control of in vitro cell culture environments so that fertility specialists can offer patients new hope in starting a family.

In 2011, Incept BioSystems was acquired by ORIGIO, a Danish company specializing in assisted reproductive technologies. In turn, ORIGIO was purchased by CooperSurgical.

InContext

#### **InContext Solutions**

#### University of Chicago | 2009 | www.incontextsolutions.com

InContext Solutions is the global leader in enterprise mixed reality (MR) solutions for total retail optimization and shopper engagement. In a time when tech-savvy consumers are driving retail innovation, they have revolutionized the way companies understand shopper behavior and bring their new ideas to life.

Founded in 2009, the Chicago-based company provides a unique, in-depth perspective on what consumers see on the shelf, how this impacts their purchase behavior, and why. Their virtual solutions are powered by ShopperMX™, an enterprise simulation, collaboration, and decision-support platform for retail merchandising. InContext takes a holistic approach to brand and retail challenges, and provides the solutions and insights needed to make faster, smarter, more profitable business decisions. Clients include Coca-Cola, Kellogg's, Molson Coors, and General Mills.

InfiniteC\infinite

#### Infinite Cooling

# Massachusetts Institute of Technology | 2018, First Place | www.infinite-cooling.com

Infinite Cooling is an award-winning startup and their mission is simple: to develop the cooling tower of the future. They help industrial plants have safer, more reliable, and more effective cooling towers by eliminating cooling tower plumes and reducing energy and water consumption.

They have a patented technology developed at MIT that uses electric fields to capture the water droplets in plumes leaving cooling towers, with advanced software to optimize the cooling process.

Infinite Cooling has a track record of success including having won a gold medal at the Edison Awards, the MIT Entrepreneurship Competition First Prize, the Department of Energy National Cleantech Competition, and the grand prize at 2018 Rice Business Plan Competition. They are based in Boston.

#### **INIA Biosciences**

University of Boston | 2022, Fifth Place | https://www.iniabiosciences.com/

INIA Biosciences is developing a medical device to modulate the immune system. Recently the company has filed three patents. They were recently featured in Nature Career. Part of Creative Destruction Labs, the Boston company recently received funding for a POC study.



### Innoblative Designs

Formerly Innoblative | Northwestern University | 2014, Fourth Place | http://www.innoblative.com/

Their mission is to develop next-generation, advanced energy surgical solutions that improve the way surgeons coagulate and ablate soft tissue to achieve better care for patients.

The SIRA™ RFA Electrosurgical Device is a next-generation radiofrequency ablation (RFA) applicator designed specifically for intraoperative coagulation and ablation of soft tissue. A single use, disposable applicator, the SIRA™ device is used in conjunction with a radiofrequency electrosurgical generator to effectively ablate target tissue. The SIRA™ device has received FDA clearance and CE Mark approval.

Based in Chicago, Innoblative has multiple platform devices in development.



#### Instapath

Tulane University | 2018 | https://www.instapathbio.com

Instapath builds microscopy platforms to improve patient care in the form of faster turnaround times and prevention of high-risk and costly repeat biopsy procedures. Their mission is to develop cutting-edge fast and easy digital pathology technology so cancer diagnoses can be made in minutes instead of days.

Based in Houston, Texas, they are supported by VentureWell, the National Science Foundation, and MassChallenge.



#### Intellidemia

Rensselaer Polytechnic Institute | 2009 | www.intellidemia.com

Concourse Syllabus is a data-driven, template-based syllabus management solution. It integrates with learning and student information systems to create, edit, and report on syllabi. Concourse provides consistency and centralization to students, faculty, and administrators that go beyond a traditional syllabus management process.

Founded by two MBA students at Rensselaer Polytechnic Institute, Concourse solved a variety of syllabus management problems Rensselaer was encountering. Today, Concourse has become the market-leading syllabus management solution at every type of college throughout the United States and abroad. Intellidemia is headquartered in New York City.



#### Interative Health

# Formerly Iterative Scopes | Massachusetts Institute of Technology | 2018 | www.iterativescopes.com

Iterative Health is pioneering the use of artificial intelligence-based precision medicine in gastroenterology (GI), with the aim of helping to optimize clinical trials investigating treatment of inflammatory bowel disease (IBD). They use advanced machine learning and computer vision to interpret endoscopic images along with other types of data, helping clinicians to better assess patients with potential GI problems. This gives practitioners enhanced capabilities in the detection, annotation, disease scoring and treatment of GI related diseases.

Iterative Health is initially applying these advances towards standardizing disease severity characterization for inflammatory bowel disease. Ultimately, the company aims to establish more meaningful endpoints to serve as better predictors of both therapeutic response and disease outcomes. The company is headquartered in Cambridge, Massachusetts.

In September 2022, Iterative Health secured FDA clearance for AI trained to spot suspicious polyps during a colonoscopy. The GI Genius program, a similar system, received the green light from the FDA in April 2021.

#### **Invictus BCI**

### Massachusetts Institute of Technology | 2022 | www.invictusbci.com

Invictus BCI is developing neuroprosthetics to harness AI for helping amputees.

Invictus BCI is a winner of the Cornell Tech Startup Awards, MIT Pear Award, and received the Venture of the Year Award from Cornell's Life Changing Lab incubator program. They are headquartered in New York City.



#### nvitris

# Technical University of Munich | 2022, Third Place | https://invitris.com

Invitris has developed a universal biotech platform, Phactory, that turns DNA into synthetic proteins— making the development of novel protein-based drugs 10,000x more efficient and cutting down material costs by 100x.

Based in Munich, Germany, the company is backed by Y Combinator and were featured in the journal <u>Science</u>, who wrote "there is a better to create bacteriophages".



#### **Kit Switch**

#### Stanford University | 2021 | http://www.kitswitch.com/

Kit Switch is a modular interiors startup delivering prefabricated components to form apartments inside vacant buildings, reducing both the cost and embodied carbon of multifamily housing developments. Kit Switch replaces the fragmented, uncertain, and time-consuming on-site retrofit process with standardized plugand-play products. Their interior modules enable housing developers to cut weeks off schedules while increasing cost and time reliability. They allow for architects to drag-and-drop pre-prepared 3D models and specs into project documentation, for production to run parallel to on-site work through a network of contract manufacturers, and for seamless connections between the building systems and their product's pre-integrated MEP. Kit Switch has a vision to create affordable homes inside the buildings they already have, and to give developers the tools to pursue the growing market of adaptive reuse.



They are a women-led team out of Stanford Engineering, with completed full-scale prototypes and letters of intent for over 200 units.

#### **KLAW Industries**

Binghamton University | 2022 | https://klawindustries.com/

At KLAW Industries, they re-purpose contaminated glass, otherwise destined for a landfill, and turn that waste into a core component of concrete. They have a patent-pending process that re-purposes that contaminated glass into a material called Pantheon™, that they sell to concrete manufacturers. Pantheon™ is ASTM-C1866 certified and can replace up to 30% of cement in concrete. Pantheon™ makes the concrete stronger, more chemically resistant, and environmentally friendly.

KLAW works out of Binghamton, New York.



### **Klymit**

# Formerly Argon Technologies | Brigham Young University | 2008, Second Place | Acquired

Klymit is a solutions company that challenges traditional approaches to the conception and fabrication of outdoor goods and apparel. Part engineers, part gear junkies, part mad scientists, and all outdoorsmen, Klymit was conceived under the idea that the experience of outdoor enthusiasts can be enhanced with new technologies and a different approach that yield quantifiably superior products. Klymit continues to expand their product line, offering sleeping pads and two series of tents. They placed second at the 2008 RBPC. Klymit is based in Kaysville, Utah.

In July 2021, Klymit was acquired by MacNeill Pride Group (MPG), a diversified global designer and manufacturer of outdoor products and sporting goods.

# knoetic

#### **Knoetic**

Formerly Twine Labs | University of Pennsylvania | 2017 | https://www.knoetic.com

Knoetic's mission is to empower the next generation of CPOs and People leaders with the right information at the right time. Their People Analytics platform allows People teams to build beautiful custom dashboards to gain high-level visibility on the KPIs that matter most or drill-down into any chart, report, and employee profile. Their CPOHQ community platform supports 2,000+ People executives and allows them to strategize together in their forum and live events, plus share playbooks and resources with one another.

Their customers are strategic People teams from category-defining companies like Figma, Gainsight, Credit Karma, and more. They understand that empowering their leaders with the right People data at the right time allows them to navigate any market dynamic with a steady hand. Based in New York City, they are backed by leading investors (Accel), angel investors (Adam Grant), and 100+ CPOs, CEOs, and founders.



**::::**LAPOVATIONS

#### **KnoNap**

#### Georgetown University | 2020 | www.knonap.com

Drug facilitated sexual assault and crime can affect anyone, regardless of age, gender, sexual orientation, and geographic location. Unfortunately, many only learn about drink spiking after a close and/or personal encounter. KnoNap works to empower, educate, and advocate against drug facilitated sexual assault and crime so everyone, everywhere stays in the know through their What Now Campaign, educational resources, and empowerment tools.

KnoNap was recently selected as one of ten finalists for Barclay's Small Business Big Wins Sweepstakes, edging out nearly 15,000 other small business entrants. KnoNap is based in Arlington, Virginia.



#### University of Arkansas | 2018, Second Place | www.lapovations.com

Lapovations is a medical device company creating a platform of innovative products to improve laparoscopy, or minimally invasive surgery of the abdomen. The company's first product, AbGrab®, is a novel device that uses suction to lift the abdominal wall at the start of the procedure. AbGrab® is more reliable and less invasive than current lifting methods.

In January 2023, they closed their Series A, which will fund the national launch of AbGrab®, a revolutionary device that allows surgeons to lift the abdominal wall more reliably and less invasively at the beginning of laparoscopy, or minimally invasive surgery of the abdomen. The company is based out of Fayetteville, Arkansas.





#### Lark Health

#### Massachusetts Institute of Technology | 2010 | http://www.lark.com

Lark was founded in 2011 on a mission to provide the highest standards of personalized and compassionate care to all in need. Their founder, Julia Hu, recognized early that live physician resources simply could not cover all of those in need of chronic condition prevention and management. To this end, Lark spent six years in AI and tech R&D developing a conversational AI coaching program for the nation's most prevalent and expensive chronic conditions. Lark's AI-driven Diabetes Prevention Program received full CDC recognition in 2018, and Lark deployed specialized programs for diabetes, hypertension, and general wellness soon after.

COVID has only further highlighted the need for scalable, accessible, and consumer-centric solutions for chronic condition prevention and management. This more broadly recognized need has reinforced their ongoing efforts to reach more members, support partners' digital-first strategies, and modernize healthcare operations -- all with the goal of delivering population-level outcomes and savings.

As a testament to their scalability and market trust in their AI-driven model, they recently closed a \$100 million Series D, their workforce has nearly doubled in the past year, and they are now contracted to manage over 30 million members.



### Leuko

#### Massachusetts Institute of Technology | 2016 | www.leuko.com

Boston-based Leuko is developing the first non-invasive white blood cell device. White blood cell assessment is a first-line indicator for various medically-relevant situations, ranging from chemotherapy management to the detection of life threatening infections worldwide. This test is currently invasive and not readily accessible - it requires patient travel, blood draws and laboratory infrastructure.

Based on MIT research, Leuko is re-imagining the way to perform these tests without extracting blood and in a portable device.



#### LFAnt Medical

#### McGill University | 2021, Sixth Place | www.lfantmedical.com

LFAnt Medical is a Montreal-based deep tech startup specializing in digitally-enabled biosensing technologies to improve the performance and accessibility of point-of-care and consumer diagnostics. LFAnt is currently developing embedded sensors and electronic hardware to enhance the sensitivity, usability, and connectivity of rapid tests across a range of bioanalytical testing applications.

# 2023 Alumni Success Stories | Rice Business Plan Competition







RWTH Aachen University | 2022, First Place | www.lidrotec.com

LIDROTEC builds laser machines to cut semiconductor microchips with high yield and high quality. LIDROTEC is currently building the first machines and delivering one to a client production site in the beginning of next year. The company, based in Germany, completed a fundraising round in 4Q 2023.

### **Light Line Medical**

Formerly Veritas Medical | The University of Utah | 2015, Fourth Place | http://www.lightlinemedical.com

Light Line Medical, Inc. is a medical device company developing novel light-based therapeutic technologies to reduce device-associated infections.

Founded in 2011, it is based out of Salt Lake City, Utah. The Light Line™ visible light phototherapy (VLP) system uses a non-UV light to disinfect catheters and reduce bacteria, which cause urinary tract infections (CAUTI), bloodstream infections, ventilator associated pneumonia, and wound and hemodialysis/peritoneal dialysis infections. This technology is translatable to several markets. These products are pre-FDA approval, and are currently undergoing testing.



#### **Lilac Solutions**

Northwestern University | 2017 | www.LilacSolutions.com

Lilac Solutions is a lithium extraction technology company based in Oakland, California. In the coming years, the electric vehicle industry will require a 20-fold increase in lithium supply. To meet this demand, Lilac has developed a patented ion exchange technology that facilitates production of lithium from brine resources with high efficiency, minimal cost, and ultra-low environmental footprint.

In April 2023, Lilac made the first successful use of ion exchange for lithium production in South America; unlocks commercial development of new, large supply of lithium from the Kachi brine project in Argentina.



#### **LiRA**

The University of North Carolina at Chapel Hill | 2021 | http://www.liraglobal.com/

LiRA is a multi-disciplinary group of professionals impassioned to partner with patients, caregivers, and health systems to provide lip-reading technology that empowers voiceless individuals and advances the standard of medical care. They work out of Chapel Hill, North Carolina.



# LoanSense Formerly Dough | University of Michigan | 2019 | https://www.myloansense.com

LoanSense is a student loan digital advisor. Seventy-one percent of those filing into federal loan programs unknowingly commit errors and get rejected from loan forgiveness costing them thousands of dollars. With LoanSense, borrowers get matched to the best federal loan repayment plan and get payments counted towards loan forgiveness, saving them thousands of dollars. They are headquartered in Ann Arbor, Michigan.



#### **Locus Lock**

#### The University of Texas at Austin | 2022 | https://locuslock.com/

Austin-based Locus Lock is an early-stage technology startup that delivers next generation GPS solutions to businesses around the globe. The company presents a robust software-defined radio (SDR) to the market that can provide end users with precise heading and positioning that can be used for positioning, navigation and timing (PNT). Their mission is to provide centimeter accurate real-time positioning to ensure globally available, high integrity positioning at a fraction of the cost.



### **Lumedyne Technologies**

### Formerly Omega Sensors | San Diego State University | 2007 | Acquired

Lumedyne Technologies specialized in next generation, micro-electrical-mechanical systems (MEMS)-based displacement sensors for a variety of markets.

The company won much recognition throughout its history, winning awards for leadership (Lumedyne's CEO was selected as a regional finalist for the Ernst & Young Entrepreneurs of the Year award), teamwork (Excellence in Technology Transfer "Success through Collaboration" with SPAWAR) and for technology. Lumedyne's technology was recognized as one of the "World's Best Technologies" at the annual World's Best Technology Showcase.

Lumedyne Technologies was acquired by Google in 2015.



#### LymphaTech

# Georgia Institute of Technology | 2014, Sixth Place | https://lymphatechnology.com

LymphaTech is a healthcare technology company focused on innovative 3D measurement solutions to enable optimal clinical care and well-being for patients and providers. Their digital measuring platform is fueled by proprietary algorithms that measure human geometry accurately and consistently in a quick and easy to use mobile platform. Atlanta-based LymphaTech provides value throughout the healthcare continuum by serving doctors, physical therapists, medical compression garment manufacturers, and patients.

### 2023 Alumni Success Stories | Rice Business Plan Competition



# M Aerospace RTC CETYS University | 2021 | https://www.maerospacertc.com

Founded in 2018, M Aerospace RTC is an advanced additive manufacturing technology company based in Austin, Texas offering rapid prototyping and production capabilities to a wide range of industries. They specialize in Metal 3D Printing technologies and services, and they offer a variety of metal materials, material combination and the ability to print large parts.

Their team of engineering experts focuses on creative solutions for complex engineering projects, while offering multiple levels of service to fit all budgets. The company is growing more than 200% year over year.

The company has several customers in the aerospace, medical, auto and oil-gas industry using their technology. They are part of the International Accelerator, Draper Startup House, and Sputnik ATX and have won several awards.

#### MALLARD BAY®

### Mallard Bay Outdoors

Louisiana State University | 2022 | https://mallardbay.com/

Mallard Bay Outdoors is an Airbnb-style marketplace where sportsmen and guides can connect, transact, and book hunting and fishing trips on a frictionless online platform. Mallardbay.com also provides back-office solutions to help these businesses showcase their trips, manage their books, and accept payments - all in one place! They offer the space for Outfitters to showcase their photos, amenities, reviews, dates, pricing, and more at no extra cost.

Their platform aims to bring the predominantly offline and highly fragmented market of discovering, comparing, and booking hunting and fishing trips to a single frictionless marketplace. The company is headquartered in Baton Rouge, Louisiana.



#### Mantel

Massachusetts Institute of Technology | 2022 | https://mantelcapture.com

Mantel is developing the first molten-salt based carbon capture technology.

Their molten borates are designed to operate at the high temperatures found inside boilers, kilns, and furnaces – enabling highly efficient carbon capture that has not been possible until now. Carbon capture can be applied across industry to reduce emissions - and even achieve net-negative emissions. By solving for efficiency Mantel can reduce energy losses by more than 60% and cut costs in half, unlocking carbon capture's role in reaching global net zero. They are based in Boston.



# Medical Informatics Rice University | 2013 | http://www.medicalinformaticscorp.com

Houston-based Medical Informatics Corp. (MIC) is revolutionizing healthcare by transforming the way patients are monitored. As a software-based monitoring and analytics company, their revolutionary SickbayTM platform archives, aggregates, and transforms otherwise not-recorded, high-resolution waveform data across disparate devices to enable real time, anywhere, anytime remote monitoring across the entire continuum of care. The same platform can then be leveraged to use machine learning and AI to deploy real-time, predictive analytics that get ahead of deterioration and risk and enable data-driven medicine and patient centered care.

In January 2019, MIC announced an agreement to deliver MIC's Sickbay platform using Dell's server and storage solutions.



# Medical Magnesium RWTH Aachen University | 2017, Third Place | www.medical-magnesium.com

medical magnesium develops metallic bioabsorbable implants for orthopaedic and trauma surgical therapy. The implants are mechanically stable and will be physiologically absorbed by the body after the fracture has healed. Therefore, a second surgery for implant removal is not necessary.

Their goal is to provide users and patients customized and highly functional solutions made of magnesium. They aim to shape a next generation of implants to provide more therapy options with just a single surgery. The use of innovative bioabsorbable implants means that metal removal is no longer necessary.

As a start-up from RWTH Aachen University, they bring results from interdisciplinary research in engineering and medicine into the surgical theatres. After extensive testing, they developed the product technology mm.X and the first products were transferred into the clinic. They are committed to transparently publish all data with high clinical evidence. Developed products include interference screws, suture anchors, compression screws and a PIP implant for surgical treatment of hammer or claw toe, as well as a foot fracture system.



#### Membrion

#### University of Washington | 2017 | www.membrion.com

Membrion helps to reduce the high cost of treating harsh industrial wastewater sources by up to 90% using a durable ceramic desalination membrane. They're a Seattle-based startup that takes pride in their diverse and adaptive culture. To-date, they've raised more \$10M from private investors & government grants and have built a pilot manufacturing facility that delivers a commercial product to meet wastewater treatment market needs.

Membrion is based in Seattle, Washington.



# MeshTek Labs aka ilumi Lighting Solutions | The University of Texas at Dallas | 2011 | https://meshtek.com/

MeshTek Labs, headquartered in Dallas TX, creates and builds smart lighting, and a variety of other systems that operate on a proprietary Bluetooth® mesh networking platform with built in Artificial Intelligence and Edge Computing solutions for direct customers and OEMs. MeshTek is a unique IoT ("Internet of Things") platform that uses Bluetooth Low Energy to form both broadcast and connection mesh networks along with optional BLE-WiFi-Ethernet-Cellular Gateway solutions, enabling efficient communication and control among networked devices. Featuring a series of extensible firmware, hardware and software products, MeshTek can be custom-tailored to meet customer application and product requirements.

They help OEMs to easily connect their devices to the Internet of Things and bring them to market fast.

Lighting is one of their most important vertical and they serve as a One-Stop-Solution for

- 1. Human-Centric Lighting
- 2. Residential and Commercial Lighting
- 3. Horticultural Lighting



#### Microlution

#### University of Illinois at Urbana-Champaign | 2005 | Acquired

Microlution Inc. pioneered the development of integrated micro manufacturing solutions for precision parts. Traditional machines are too slow and too expensive to create the micro parts required for today's advanced automotive, consumer, medical and aerospace products. Microlution's micromachining products use both laser and milling technologies.

Microlution has been featured in trade publications including Micro Manufacturing Magazine, Commercial Micro Manufacturing and Engineering TV. With its partners, Microlution was awarded a grant from the U.S. Department of Energy to develop an energy efficient method for micromachining complex shapes using ultrafast laser technology. Additionally, the University of Cincinnati BioMicroSystems Labs successfully used Microlution to machine precision microfluidic channels for particle separation and electrochemical solutions. Based in Chicago, Illinois, Microlution proudly designs and builds every machine in the United States.

In May of 2016, Microlution was acquired by GF Machining Solutions. At the time of sale, Microlution was generating \$10 million in annual sales and had a workforce of 30 people. Microlution continues to be run by founders and RBPC alumni Andy Phillip and Andrew Honegger. Lincolnshire, Illinois-based GF Mining Solutions intends to use their purchase to broaden their technology portfolio and better serve clients in the medical and aerospace industries. Details of the sale remain confidential.



# MicroTransponder The University of Texas at Dallas | 2008, Fourth Place | www.microtransponder.com

MicroTransponder has developed the Paired Vagus Nerve Stimulation System (Paired VNS™ System) based on decades of neuroscience research. The Paired VNS™ System is designed to treat several neurological conditions. Their initial focus is upper limb deficits among chronic stroke patients.

In 3Q 2021, their FDA Breakthrough Device, the Vivistim Paired VNS System, was granted pre-market authorization approval. It is used with rehabilitation therapy to help improve arm and hand function in stroke survivors. The company closed their Series E in late 2022.

# MindTrace Carnegie Mellon University | 2021

MindTrace is a Pittsburgh, PA-based company established in 2020 as a spin-off from Carnegie Mellon University for the purpose of commercializing innovations to predict how neurosurgical interventions will affect patients' minds.

They are developing a novel, patent-pending software device that utilizes Artificial Intelligence/Machine Learning to integrate multiple sources of information to enable clinicians to more effectively plan neurosurgery in support of the best postoperative quality-of-life.

MindTrace allows a clinical team to iterate on their surgical plan by exploring different paths of approach to a lesion, and the consequences of being more or less aggressive with the resections at the margin between lesion and healthy brain tissue.

Put simply, patients want to be confident they will be the same person coming out of brain surgery as they were going into surgery—and surgeons want tools that support quantitative preoperative surgical planning and evidence-based projections of post-operative function.



# MITO Material Solutions Oklahoma State University | 2017, Second Place | http://www.mitomaterials.com

MITO Materials makes products lighter, stronger, and more durable. Their hybrid additives are designed to solve material problems at low concentrations without changing the manufacturing process – empowering industries to transition away from metals and into composite materials, creating a longer lasting, lighter, more sustainable future. The founders were on the 2021 Forbes 30 under 30, Manufacturing/Industry list. Funding is from the National Science Foundation, matching state grants, and corporate investors.

In 2021, they finalized their first commercial sale to Folsom Custom Skis. They are participating in Greentown Labs Accelerator around supply chain decarbonization in the automotive industry. Recently the company launched a formulated resin product for the ski industry. Collaboratively launching 3 new products with MITO inside later in 2023 in the sporting goods market. MITO is the first company to receive industry recognition as the First Graphene Functionalized Product, awarded by the Graphene Council.

Headquartered in Indianapolis, Indiana, MITO Materials came in second at the 2017 Rice Business Plan Competition.



#### mobius

# Formerly Grow Bioplastics | The University of Tennessee, Knoxville | 2016 | www.mobius.co

At mobius, they're creating a world where There's Wonder in Waste. They're a mission-driven company focused on eliminating waste by leveraging industrial organic waste streams from agriculture, forestry, paper and biofuel & biorefining industries to create new materials and chemicals.

Their first product is a proprietary, biodegradable polymer made from lignin, a natural material found in all grasses and trees that is produced as waste at a rate of over 50 million tons each year by the paper and biofuel industries. With this biopolymer, they are creating a bio-based, biodegradable plastic pellets for applications in horticulture, agriculture, food service packaging, and beyond.

mobius is headquartered in Knoxville, Tennessee.



#### ModulusTech

Formerly Modulus Housing Solutions | Indian Institute of Technology, Madras | 2019 | www.modulus-tech.com

Headquartered in Karachi, Pakistan, ModulusTech develops housing technology for social and environmental impact.

While 1.6 billion people lack adequate housing today, buildings account for nearly 40% of the global energy consumption. Considering the imminent threat of climate change and rapid growth in population, the way they live today needs to change. That is what makes ModulusTech's housing technology a powerful antidote – reducing CO2 emissions to a mere fraction of conventional houses.

The future as they see it is one where housing is accessible and sustainable for all, one where the greener choice is more affordable, and the way they live does not harm the planet. ModulusTech has started this journey by building self-sustaining communities for the most underserved segments of society, providing not just homes but better health, stability, and economic opportunities. The inhabitants are also provided the means to live their day to day lives with access to renewable sources of energy and clean water – forming a neutral carbon footprint. With their mission to provide sustainable living for all, they continue to foster innovation and strive to provide solutions for wide scale impact contributing to over 9 UN SDGs (Sustainable Development Goals).



#### Modvion

#### Chalmers University of Technology | 2016 | www.modvion.com

Swedish wood technology company Modvion develops demanding designs made of laminated wood, nature's carbon fibre, for large-scale applications. Wooden designs enable radical reductions in emissions by replacing emission-heavy material such as steel and concrete. Thanks to their patented module system, Modvion has been able to develop wind towers at decreased manufacturing costs and more efficient transportation for installations of tall towers.

The company's latest investment comes from leading global wind turbine manufacturer Vestas Wind Systems. Modvion is based in Göteborg, Sweden.



#### MODX

Formerly Enterprise Theory | Southern Methodist University | 2009 | www.modx.com

MODX is the company that backs the open source Content Management System and Web Application Framework, MODX, based in Dallas, TX, USA.

MODX Revolution is the world's fastest, most secure, flexible and scalable Open Source CMS. Their cloud platform, MODX Cloud, is the ultimate hosting for modern PHP applications, especially MODX. Awesome Performance. Amazing Tools. For Everyone.

If flexibility, scalability, speed and security are important to your website, you need their MODX Revolution Open Source Content Management System (CMS).

### 2023 Alumni Success Stories | Rice Business Plan Competition



# Movellus Formerly Movellus Circuits | University of Michigan | 2014 | http://movelluscircuits.com

Movellus is a leader in Intelligent Clock Networks<sup>™</sup>. Customers integrate their products into an array of applications ranging from ultra-low power edge Al devices to performance centric cloud datacenter compute and Al offerings. Headquartered in San Jose with R&D centers in Michigan and Toronto, the team has introduced patented architectural innovations that significantly improve clock network performance, enabling the next generation of complex integrated circuits.

They closed their Series B in September 2022. The funding will be used to expand R&D efforts and build out the marketing and sales functions to support the company's growth plans.



#### **NABACO**

#### Texas State University | 2019 | www.nabacoinc.com

Nabaco is developing a proprietary coating technology to extend produce shelf life (NatuWarp ®) With low production costs and easy application methods, Natuwrap is a potentially transformative solution for some of the most pressing matters relating to food shortages. Natuwrap triples the shelf life of the fruits and vegetables that they have tested. This product is also environmentally friendly and can be applied with either spraying or dipping methods which eliminates packaging waste.

Headquartered in San Marcos, Texas, Nabaco has received endorsements from H.E.B. Grocery and raised a seed round. The company has secured a registered U.S. Patent. They've met FDA requirements and earned Organic OMRI certification They are also now working with plantain farmers in Ghana, Africa and with a bottle company in Italy.



# Nano Precision Medical University of California, San Francisco | 2009 | Acquired

Nano Precision Medical developed drug implants by leveraging the company's proprietary NanoPortal drug implant technology. These drug implants, designed to deliver minimally fluctuating drug profiles, will address drug non-adherence which is one of the top reasons for suboptimal clinical benefit associated with oral and injectable products that treat chronic disease. The company's lead product, NPM-119, is a GLP-1 receptor agonist under development to treat patients with Type 2 diabetes.

In 1Q 2022, Nano Precision Medical was acquired by Second Sight Medical Products. Second Sight Medical Products (Nasdaq: EYES) develops implantable visual prosthetics that are intended to deliver useful artificial vision to blind individuals. The Company's headquarters are in Los Angeles, California.

### 2023 Alumni Success Stories | Rice Business Plan Competition



#### NanoGraf

# Formerly SiNode Systems | Northwestern University | 2013, First Place | www.nanograf.com

NanoGraf is an advanced battery material company whose patented silicon-anode technology enables longer-lasting, higher-energy, and higher-power lithium-ion batteries. NanoGraf works with more than 50 companies, including some of the world's leading consumer electronics, household appliance, and power tool brands, and over 12 strategic partners in electric mobility (from startups to Fortune 100s). NanoGraf is a spinout of Northwestern University and Argonne National Laboratory.

Their recent Series B funding supports onshoring of its silicon anode production in Chicago and the continued development, production and supply of advanced lithium-ion technologies.



#### Nanopath

# Formerly Nanopathdx | Dartmouth College | 2020, Second Place | www.nanopathdx.com

Nanopath is a molecular diagnostics company disrupting traditional testing methodologies. They aim to improve the health of women by providing granular and clinically actionable information within a single office visit. The team recently closed their Series A round and is based in Cambridge, Massachusetts.



#### **NASADYA**

### University of Illinois at Urbana-Champaign | 2021 | www.nasadya.com

NASADYA is optimizing AEM Electrolyzers to produce cheap green hydrogen for refineries by using waste/excess energy from power plants. Funded by VentureWell, they participated in the inaugural class of Rice's Clean Energy Accelerator. The company is based in Champaign, Illinois.



#### Neopenda

#### Columbia University | 2016 | www.neopenda.com

At Neopenda, they believe that the most vulnerable patient populations in the world deserve access to high quality health care. They're a social enterprise startup passionate about improving newborn health through innovative technology solutions, and implementing them sustainably in emerging markets. Neopenda's first product is a scalable wireless vital signs monitor for patients in overcrowded, understaffed health facilities. Their solution reduces response time to newborns in distress, and helps healthcare workers to save more lives.

Based in Chicago, they are currently validating their technology in clinical studies with their partners in Uganda. As of 1Q 2023, Neopenda's flagship product, neoGuard, is now available in Kenya and Uganda.



#### Neurable

#### University of Michigan | 2016, Second Place | www.neurable.com

Neurable's vision is to create a world where people live without limitations. Their revolutionary brain-computer interface allows people to control software and devices using only their brain activity. They were featured on Netflix's and The Verge's 'The Future Of' series.

Boston-based Neurable is partnering with Trimble to advance brain-computer interface technology solutions for the transportation and architecture, engineering, and construction industries.

Neurable placed second at 2016 Rice Business Plan Competition.

#### Neurava

#### Purdue University | 2021 | https://neurava.org

Neurava is developing a wearable device to monitor and alert for the impending risk of SUDEP, or sudden, unexpected death in epilepsy. A recent seed round will support a final prototype and run epilepsy monitoring studies to collect human data. Neurava is headquartered in West Lafayette, Indiana.



#### **Niricson Software**

# Formerly HRG Infrastructure Monitoring | University of Victoria | 2019 | www.niricson.com

Niricson is one of the fastest-growing start-ups in Canada, having top hydro dam owners and engineering consulting firms as clients worldwide. Their AUTOSPEX™ platform and DRONIC (Patent- Pending Data Collection Technology and Architecture) provide asset managers and civil engineers critical insights and multi-defect layer visualization for the current condition of their assets.

At present, their solutions are being deployed on concrete structures of various asset classes around the world. Niricson is based in Vancouver, Canada.



### **Noleus Technologies**

### Rice University | 2018 | http://www.noleustechnologies.com

Noleus Technologies is a Houston-based medical device company focused on developing and commercializing innovative technologies based on a platform to reduce swelling and to improve outcomes post-surgery. Their first product aims to establish a new standard of care for post-operative ileus through their differentiated and proprietary technology to reliably accelerate the return of bowel function after abdominal surgery.

Based in Houston, they joined Venture Well as part of the Aspire Medtech Fall 2022 Cohort.



#### NOMA AI

#### University of Pittsburgh | 2020 | http://noma.ai

NOMA AI is a medical technology startup building a new generation of real-time clinical decision support solutions to help prevent medical complications and adverse medical events. Their leadership team brings more than 70 years of experience in developing a patient monitoring and algorithmic diagnostic solution for healthcare using artificial intelligence and machine learning.

As researchers at the University of Pittsburgh, for the first time, they have developed a groundbreaking technology that predicts medical errors and monitors patients' conditions and problems by processing thousands of types of patient information from electronic health records in real-time. In 2022, the company joined the TMC Accelerator Bootcamp.



### Novira Therapeutics

# Formerly Molecmo Nanobiotechnologies | Harvard University | 2007 | Acquired

Novira Therapeutics Inc. discovered and developed first-in-class therapies for the treatment of chronic hepatitis B (CHB) infection, a global disease with a high level of unmet medical need.

Novira Therapeutics built a world-class team with a proven track record of success in drug discovery and development combined with a deep expertise in HBV virology. The research and development team employed innovative chemistry and biology technologies to discover small molecule inhibitors of the HBV Core or capsid protein as well as other drugs with novel modes of action. The company's novel therapeutic antivirals overcome the limitations of current CHB therapies when used either as mono-therapy or in combination with existing standards of care.

Novira Therapeutics was acquired by Johnson & Johnson in December 2015.



#### **NuMat Technologies**

#### Northwestern University | 2012, First Place | http://numat-tech.com

NuMat Technologies is a materials technology company, innovating at the intersection of high-performance computing, data engineering and chemistry to deliver transformational solutions to the semiconductor, life sciences, energy and industrial sectors. A pioneer in the field of Programmable Chemistries including Metal-Organic Frameworks ("MOFs"), NuMat programs materials to uniquely interact with target molecules at the atomic level, and then integrates these materials into next-generation encapsulation, separation and catalytic solutions. NuMat provides a total solutions platform for product commercialization, pairing world-class material discovery software with application development and manufacturing expertise.



#### **NVBOTS**

#### Massachusetts Institute of Technology | 2014 | Acquired

Spun out of MIT by a team of four MIT engineers, New Valance Robotics (NVBOTS) provided enterprise and industrial 3D printing solutions that delivered high throughput production of parts in metals, composites, ceramics, and polymers for functional applications. The NVPro, with patented auto part ejection technology, was the only 3D printer Built to Share™. It offered the first automated part ejection in the industry and was paired with NVCloud software that allows users to print parts anytime, from any device − while providing administrators with full control of print queues and workflows typical in a shared-use scenario. The NVPro was uniquely suited for continuous 24-7 operation in multi-user environments and production 3D printing environments.

In January 2017, NVBOTS spun out a metal printing company, Digital Alloys. Digital Alloys raised a Series A in their first couple months of operation and is headquartered in Burlington, Massachusetts. NVBOTS was one of Fast Company's Top 10 Most Innovative Companies in Education for 2016. Co-founder, Chris Haid, was named to Forbes' 2015 list of 30 Under 30 in Manufacturing and Industry.

Cincinnati Incorporated acquired NVBOTS in November 2017. Based in Harrison, Ohio, Cincinnati Incorporated manufactures laser cutting systems, powdered metal presses, and additive manufacturing machines.



#### **Ocean Access**

Norwegian University of Science and Technology | 2020 | www.oceanaccess.no

Ocean Access is a Norwegian startup addressing the increasing need for remote ocean monitoring across different industries.

They are developing a fully submersible ocean data buoy that can move up and down the water column. This enables the buoy to be submerged and placed subsea, where it is protected from vessels and damaging waves and wind on the ocean surface. The solution will significantly reduce the cost and provide increased reliability for accessing our oceans remotely.

In 2021, Ocean Access was accepted to Techstars' accelerator program.



#### Olera

Texas A&M University | 2022 | https://www.olera.care/

Based in Edinburg, Texas, Olera is building a modern guide to senior care planning.



#### **OmniLife**

# Formerly HealthTech Solutions | The University of Iowa |2017 | https://www.omnilife.ai/

OmniLife Health is setting a new standard in clinical workflow automation by connecting care teams throughout the organ transplant journey and other complex care environments. The platform accelerates optimal health outcomes with reliable digital tools to simplify and standardize complex care, optimize billing and revenue capture, and encourages purposeful collaboration across the enterprise, external partners, and patients. They help transplant centers digitize their organ intake checklists and protocols, as well as patient waitlist management to increase productivity, reduce the impact of staffing shortages, optimize performance and billing, and ultimately transplant more patients.

They are headquartered in Lexington, Kentucky.



#### **OmniVis**

# Formerly PathVis | Purdue University | 2017 | https://www.omnivistech.com

One in six people suffer from food borne illness every single year. OmniVis wants to see zero cases of illness.OmniVis developed a handheld device to detect food borne pathogens in under 30 minutes - a vastly shorter time than the current three day lab process. They save food processing facilities from the costs of recall and down time with their innovative technology.

OmniVis just won a cash prize from Purdue's Ag-Celerator and is participating in Imagine H2O's accelerator. They are based in South San Francisco, California.



#### Onetrack.ai

Formerly Intelligent Flying Machines | Northwestern University | 2017 | https://www.onetrack.ai

Based in Chicago, Illinois, OneTrack.AI offers an industry-leading Warehouse Intelligence Platform powered by cameras and Deep Learning software.

The OneTrack Solution uses AI to detect anomalies or unusual events and assists with labor performance management. Once an exception is detected, it is recorded, and site-leadership is notified automatically. The OneTrack Solution includes workflow tools that facilitate investigation, documentation, and resolution to help drive continuous improvement and accountability as well as integrations with leading Warehouse Management Systems for end-to-end visibility.



# OpenLoop Formerly Apollo | The University of Iowa | 2020 | https://www.openloophealth.com

OpenLoop was co-founded by CEO, Dr. Jon Lensing, and COO, Christian Williams, with the vision to bring healing anywhere. Their solutions are thoughtfully designed to streamline and simplify go-to-market care delivery for companies offering virtual support to patients across an expansive array of specialties in all 50 states, with patient-friendly insurance coverage. OpenLoop's deep investment in compliant, easy-to-use telehealth technology and top-tier providers is among the advantages that sets them apart in the industry.

In April 2023, they acquired Imaging Panda, allowing OpenLoop to continue to expand its suite of innovative solutions and aligns with their mission of enabling convenient access to quality care for patients in all 50 states. The company is based in Des Moines, Iowa.



### **Opharmic Technology**

Formerly Sonikure Technology | The Hong Kong University of Science and Technology | 2015 | http://www.opharmic.com

Founded in 2016, Opharmic is striving towards an ambitious goal: to replace horrifying eye injections around the world with their patented non-invasive ultrasound system.

Based on over a decade of research and development, the team has successfully developed extensive drug delivery applications in the ophthalmology space. From technology and product customisation, to clinical development and regulatory strategies, Opharmic offers a turnkey solution to pharma partners around the world to adopt cutting-edge technology in their new or existing pipelines.



#### Ourobio

Formerly Transfoam | University of Virginia | 2021 | https://www.ourobio.com

Ourobio is a young synthetic biology, biomaterials, & circular economy company. They develop engineered microorganisms to turn industrial byproducts into low-footprint, performance-enhancing biodegradable plastic additives.

Based in Indianapolis, Indiana, they are currently working on second EPA SBIR, a Phase I award was (granted in December 2022. In March, they filed a full patent and PCT application and were invited to speak in the Rethinking Materials Startup Showcase. The company pitched in the Capital Factory Maritime Innovation and the Blue Economy side event at SXSW. Ourobio was recognized as Plug & Play Top 15 New Materials and Packaging innovations and was accepted to the corresponding accelerator track.



#### **Owlet**

Formerly Owlet Baby Monitors | Brigham Young University | 2013, Fourth Place | www.owletcare.com | Exit, Public Company

Owlet Baby Care is a health technology company founded by a team of parents in 2013. The company's flagship product is the Smart Sock Baby Monitor, which uses pulse oximetry technology to track a baby's heart rate and oxygen levels during sleep.

Owlet has been featured in numerous publications including The Wall Street Journal, The Washington Post and ABC News. The company, based in Lehi, Utah, was a finalist at the 2013 Rice Business Plan Competition.

In February 2021, Owlet announced their intent to merge with Sandbridge Acquisition Corporation, a publicly traded special purpose acquisition company. The merger will take Owlet public on the New York Stock Exchange with the anticipated ticker symbol of "OWLT."



### **OYA Femtech Apparel**

University of California, Los Angeles | 2021, Fifth Place | https://wearoya.com/

Oya Femtech Apparel was founded at the Venture Accelerator at UCLA Anderson by Mitchella (Mitch) Gilbert and Patrick Ayers. Oya creates highly functional, quality athletic apparel designed to support feminine health. Oya leggings are the first of their kind to be physician-tested, and athlete approved, with over 60 medical professionals and 200 product testers supporting product development.

In an athletic apparel industry dominated by men, Oya advocates for the inclusivity and health of people with vaginas. Additional investors include Urban Capital Network, Seed at the Table, Little Green Bamboo, and Emmeline Ventures. Oya Femtech Apparel has been featured in Bolt PR (A Millwright Agency) for Femtech Brands to Watch in 2023. They headquarter in Los Angeles, California.



#### Oze

Massachusetts Institute of Technology | 2018, Sixth Place | https://getoze.com

Oze is a platform that equips small business owners in Africa to make data-driven decisions to improve their performance, tap into networks, and access capital. Oze's platform is comprised of two components. On one side is a mobile app for small business owners that aggregates and analyzes transaction data to push context-specific recommendations and reports. On the other side is a portal for financial institutions that combines the app's crowdsourced data with alternative data sources to assign a credit risk score to each Oze user. Through the portal, banks can source and support a small-business loan portfolio.

They are based out of Accra, Ghana.



#### **Pareto**

#### Stanford University | 2022 | www.shoppareto.com

Based in Chicago, Pareto is a direct-to-consumer, women's clothing brand, making getting dressed the easiest part of your day.

Through timeless wardrobe essentials and personalized styling "recipes", they make mornings a breeze. No more sifting through endless brands to find your perfect t-shirt dress. No more frantic mornings feeling like you have nothing to wear.



#### **PathoVax**

### Johns Hopkins University | 2016 | www.pathovax.com

PathoVax LLC, is a start-up company that is based on foundational technology developed at Johns Hopkins University to advance RGVaxTM, the world's first comprehensive HPV vaccine that aims to target all clinically relevant HPV. It is expected that such additional protection will eventually establish new standards in the \$2B HPV market.

Based in Denver, Colorado, PathoVax's collaborative partnerships include well-known institutions such as the U.S. National Cancer Institute to push forward an academic phase 1 study. In March 2023, the FDA cleared the IND for PathoVax's licensed HPV vaccine, HPV16 RG1-VLP monovalent, for Phase 1 clinical trials. This is a major step towards developing a universally preventative HPV vaccine.

# pathware

#### **Pathware**

Formerly MedKairos | University of Michigan | 2018 | https://www.pathware.com

Pathware is a privately held MedTech company based in Denver, Colorado and with offices in Seattle, Washington. The company is focused on developing hardware and software to bring digital pathology from the central lab to the point-of-care. They raised their A round in 2Q 2022. The company intends to use the funds to continue expanding the team and to submit the integrated hardware and software system to the FDA for clearance.



#### **Perception Robotics**

Somatis Sensor Solutions & Somatis Technologies | University of Southern California | 2011 | Acquired

Perception Robotics was a sensor technology company focused on biologically inspired material handling systems. They build bio-inspired robotic hands for industrial automation. They sold a compliant, human-like gripper and a gecko inspired gripper for large, flat objects.

In 2018, Perception Robotics was acquired by On Robot. On Robot combind Perception with Hungary-based OptoForce, and Denmark-based On Robot to become OnRobot.



#### **PhoneSoap**

#### Brigham Young University | 2012 | https://www.phonesoap.com/

PhoneSoap was founded by two cousins while they were studying at BYU. While watching a news report, they discovered that the average cell phone was 18x dirtier than a public toilet. Further discovery found that 1 in 6 cell phones had fecal matter, and all types of bacteria, flu, and germs. Though neither were germaphobes, the cousins knew the way they used their phones basically made them a petri dish in their pockets. So they set off to find a solution.

They constantly are touching and handling phones and other devices and when they are not, they keep them in dark, warm places where they become the perfect breeding ground for bacteria. Leveraging the UV technology they used in a cancer research lab, they created a device that was consumer-friendly for quick and easy device sanitizing. Thus began the clean phone revolution!

With PhoneSoap you can clean, sanitize, and charge your devices and ensure that your devices aren't making you sick. The company is based in Provo, Utah.

# Photonect Interconnect Solutions University of Rochester | 2022 | https://www.photonectcorp.com

Photonect provides novel optical fiber-to-chip attachment technology using laser adhesion which is 4X efficient and 10X faster than the current solutions providing a 50% cost reduction. Photonect provides engineering solutions to Senior Product Managers at CISCO, Intel, and CIG, optical transceiver companies who want low-loss and low-cost fiber-to-chip attachment techniques. Current technology uses glue to attach fiber-to-chip, taking more than 10 minutes, uses manual labor, and is susceptible to environmental fluctuations. Photonect uses a CO2 laser to melt an optical fiber into a photonic chip/ waveguide forming a glass-to-glass bond that is permanent.

The company, based in Rochester, New York, joined the Luminate Accelerator in 1Q 2023.

#### **PLAKK**

#### McGill University | 2022 | www.plakk-ai.com

Through the use of artificial intelligence and deep learning, PLAKK will revolutionize how researchers and clinicians characterize atherosclerotic plaques. By better understanding what the plaque is made of, they will be able to improve the prediction, treatment, and ultimately the prevention of heart attacks and strokes.

PLAKK is based in Montreal, Canada.



# Power2Switch University of Chicago | 2010 | Acquired

Power2Switch used design, data, and technology to help consumers make responsible decisions about their energy usage and expenses. The company helped residents and businesses reduce energy costs through an online comparison of competitive rates and an automated switching process to new electricity suppliers. The service was provided free of charge. The company also delivered greater awareness of energy deregulation, created a competitive landscape for suppliers and promoted the use of renewable energy.

In September 2013, Power2Switch was acquired by Choose Energy for an undisclosed amount. Choose Energy is an online marketplace for electricity consumers based in San Francisco, California.



### **PrepMe**

#### Stanford University | 2005 | Acquired

PrepMe was an education company dedicated to bringing high quality, customized learning to students. It launched the first open adaptive learning platform, Coursification. Over the years, the company garnered significant press coverage in publications such as FORTUNE, Small Business Magazine and CNN.com.

In 2011, PrepMe was divided and sold. Its adaptive learning platform for higher education was acquired by the Providence Equity-backed Ascend Learning. PrepMe's college test prep and adaptive learning platform for grades K–12 was acquired by Naviance in February 2012.



#### Qcue

#### The University of Texas at Austin | 2008, First Place | Acquired

Qcue created the world's first dynamic pricing engine for live entertainment events, forever changing the way sports and entertainment tickets are priced. Sophisticated algorithms analyze real time sales data and other external factors to generate sales and revenue forecasts based on various price recommendations. Once approved, price changes are automatically pushed to ticketing systems that process the changes at the point of sale and across all channels.

Twice named one of the 10 Most Innovative Companies in Sports and one of the 50 Most Innovative Companies in the World, Qcue added millions of dollars in revenue annually for its clients. Their pricing and revenue management solutions are used by sports teams, performing arts organizations, venues, and promoters around the world, spanning three continents and more than a dozen of the world's premier sports leagues.

In July 2021, Qcue was acquired by NYC-based On Location, Endeavor's luxury events business.



# Quad Technologies Northeastern University | 2013 | Acquired

Quad Technologies developed bioprocessing reagents for cell-based therapeutics. Their QuickGel chemistry for separation and activation improved clinical grade cell and gene therapy applications and research.

Quad Technologies was acquired by Minneapolis-based Bio-Techne in June 2018.



#### Quantal

Formerly Quantum Lock Technologies | The University of Tennessee, Knoxville | 2020 | https://www.quantalsecurity.com

Quantal began in 2018 while the founder, Erica Grant, was in graduate school getting her PhD in quantum computing. She had the idea for Quantum Lock and built the first prototype as a proof of concept in her free time. Using that prototype, she was able to get some grant funding from business plan competitions to develop the intellectual property and build a team to create more advanced prototypes.

Based in Beverly, MassachQuantal raised a seed round in 4Q 2022.



# Quantitative Insights University of Chicago | 2011 | Acquired

Quantitative Insights, Inc. was formed to realize the clinical and commercial value of QuantX, which provides software-only, real-time analysis of breast imaging exams.

Developed in the labs and clinics of the University of Chicago to improve outcomes while significantly reducing costs, QuantX addresses critical needs of clinicians, practice administrators and patients. In research settings, QuantX increased both the efficiency and accuracy of breast cancer diagnosis. The QuantX platform received de novo clearance from the FDA in 2017.

In July 2019, Quantitative Insights was acquired by Paragon Biosciences and renamed Qlarity Imaging.



#### **QV Bioelectronics**

The University of Manchester | 2020 | https://www.qvbio.co.uk

QV Bioelectronics are striving to deliver longer, better quality lives for brain tumour patients. Using their first of its kind electric field therapy device GRACE. With this approach, QV aims to provide continuous treatment, at an early stage, without impacting patient quality of life.

The company has recently closed a pre-series A round and received a UK government grant. They are hiring three full time employees with a move to total of 11. Additionally, they completed a large animal pilot trial. QV Bioelectronics is currently in Houston working with the Texas Medical Centre as a BioBridge member for UK companies.



#### **Reach Production Solutions**

Formerly Hicor Technologies & OsComp Systems | Massachusetts Institute of Technology & Harvard University | 2010 | Acquired

Reach delivers long-lasting production enhancement to multiphase wells - more, faster, and longer production; quick and easy recovery; and a complete solution that keeps production flowing. Specializing in multiphase wells, they have found a solution to costly well interventions when it comes to artificial lift or fract hit fluid recovery. Reach installs on the surface – meaning it's quick, easy, and even more effective than traditional artificial lift techniques.

Reach Productions Solutions was acquired by Forum Energy Technologies (NYS: FET) for an undisclosed amount on March 1, 2022.



# Rebellion Photonics Rice University | 2010, Second Place | Acquired

Rebellion Photonics provides visual gas monitoring solutions that maximize safety, operational performance, emissions mitigation and compliance in the oil and gas, petrochemical, and power industries. They placed second at the 2010 RBPC.

In December 2019, they were acquired by Charlotte, North Carolina-based Honeywell. Rebellion will operate under Honeywell's Safety and Productivity Solutions division.

#### Refractal

Formerly PreDxion Bio | University of Michigan | 2016 | http://www.refractal.com/

Refractal is a University of Michigan spin-out company backed by Y Combinator, Paul Buchheit, and Invest Detroit, and has received funding from the National Institutes of Health. Their pipeline project received FDA Breakthrough Device designation for the development of their core localized surface plasmon resonance (LSPR) biosensor technology for use in guiding life-saving immunomodulation therapy selection in critically ill patients with acute respiratory distress syndrome.

Refractal is backed by Y Combinator, Invest Detroit, and angel investors. The San Francisco-based company received funding from the National Institutes of Health.



#### RefresherBoxx

#### RWTH Aachen University | 2020, Fourth Place | www.refresherboxx.com

The RefresherBoxx disinfects, dries and refreshes textiles but without using any water or chemistry. It uses an intelligent combination of physical methods, like light, active oxygen, variation of temperature and air pressure. Thereby it is environmentally friendly, time saving and gentle on the material to simply refresh cloth instead of washing.

In April 2023, RefresherBoxx won the Innovation & Trend prize at the FIBO Global Fitness in Cologne. They are based in Aachen, Germany.



#### Relavo

#### Johns Hopkins University | 2020, Seventh Place | https://relavomedical.com

Relavo is developing a novel device to prevent infection in peritoneal dialysis, a form of at-home treatment for end-stage renal disease. By minimizing the risk of infection, they enable more patients with kidney failure to receive quality care in the comforts of their own homes.

In 2023, the Brooklyn, New York company was accepted into BK-XL, a new accelerator program that provides resources, mentorship and funding to BIPOC entrepreneurs in Brooklyn. The company also recieved investment money from the National Kidney Foundation.



#### Relish

#### Formerly RelishMBA | University of Virginia | 2015 | www.relishmba.com

Based in Charlottesville, Virginia, Relish strives to make the recruiting hiring process as user-friendly as possible. They run the RelishCareers recruiting platform, designed to help premier global employers connect with top master's degree candidates and entry to senior level high-caliber talent.



#### ReMatter

#### Stanford University | 2020 | https://rematter.com

ReMatter builds the modern operating system for the \$100B+ scrap metal recycling industry. Despite the incredible hardware and materials expertise in the industry, scrap software has not kept pace with technological growth.

They create products that meaningfully impact the lives of recyclers by making the process of managing their business easier and more accurate. Additionally, data-driven pricing and digital payments can drive revenue and streamline the buying and selling of commodities.

ReMatter was co-founded by three Stanford University classmates in March 2020.



#### Remmie

# Formerly MiVUE | University of California, Los Angeles | 2019 | https://remmiehealth.com

Remmie Health is a digital health technology venture targeting 22+ upper respiratory conditions, causing over 120 million annual visits as the leading reason for ambulatory care, impacting every family 2-9 times a year. Remmie's patient-centric primary care at-home examination devices and deeply-engaging assisted diagnosis empower customers with the convenience of hybrid care for any upper respiratory symptoms, from the comfort of their homes or at points of care.

Remmie's team won the Muse Innovation Fellowship, UCLA Knapp Venture Competition, a prize at the Rice Business Plan Competition, and is a UnitedHealthcare Accelerator powered by Techstars and Plug and Play portfolio company. The company is currently based in Seattle, Los Angeles, San Francisco, and London. They have received their Class 1 Device status from the FDA and were awarded National Institute of Health SBIR Grant to develop the Remmie.ai platform.



#### Rendever

#### Massachusetts Institute of Technology | 2017 | www.rendever.com

Rendever is overcoming social isolation through the power of virtual reality and shared experiences. From senior living communities to hospitals, their platform is being used to reduce depression and loneliness by fostering personal connections amongst populations where life has become limited. Participants in group sessions can check off bucket list items together, revisit meaningful places and share stories, stay engaged with family members, and more.

Rendever is being used by high-profile senior living operators including Revera, Benchmark, and SRG, healthcare systems such as UCHealth and Cleveland Clinic, has research funded by the NIH and NIA, and has commercial partnerships with major organizations like AARP and Verizon. In April 2023, they were featured alongside AARP in BBC StoryWorks new series "Technology's Golden Age".



#### Resonado Labs

# Formerly Resonado | University of Notre Dame | 2019, Second Place | www.resonado.com

Resonado Labs is a Chicago-based audio technology company founded in 2017. Resonado revolutionized the audio industry with the introduction of Res-Core™, a proprietary loudspeaker motor that enabled high-performance racetrack loudspeakers, a new category tailored for modern audio products. Today, Resonado develops designer drivers for brands and manufacturers engineered with Res-Core motors and high-tech tactical communication systems for the United States Air Force and Special Forces. Resonado's team is dedicated to drastically enhancing the delight factor of audio products for listeners worldwide - driven by radical, high performance engineering at the core.

In September 2022, they entered into a licensing agreement. Lippert Components, Inc will design, manufacturing, and distribution for the Resonado brand. Lippert and Resonado will continue to collaborate at a technology development level.

### 2023 Alumni Success Stories | Rice Business Plan Competition

#### **Revolute Robotics**

#### The University of Arizona | 2021 | http://www.revoluterobotics.com/

Revolutionary hybrid aerial & ground robots; Revolute Robotics introduces the first autonomous, energy-efficient robot that's capable of both rolling and flying. Safely operate in tight spaces with over 10x the battery life of your standard drone.

Created for inspection, mapping, & surveillance for construction sites, building/event security, power plants, oil refineries, mines, American soldiers, and more. They are based in Tucson, Arizona.



#### Rhaeos

### Northwestern University | 2019, Fourth Place | www.rhaeos.com

Rhaeos, Inc. is a VC backed, clinical stage medical device company developing FlowSense, a platform technology and a noninvasive wireless, wearable skin patch that can assess and monitor fluid flow beneath the surface of the skin. The company is initially targeting hydrocephalus, a life threatening condition caused by an abnormal accumulation of cerebrospinal fluid (CSF). Implantable shunts, the gold standard treatment, often fail, leading to multiple trips to the emergency room and repeat surgeries. There is no technology available today that can easily assess CSF flow in shunts wirelessly, bedside, and without capital equipment until now. FlowSense by Rhaeos can detect CSF flow in a matter of minutes in the hospital and home.

Rhaeos recently <u>closed</u> their Series A, received FDA breakthrough designation, published clinical data in Science and Nature family journals, and is conducting a 10 center pivotal study in support of FDA marketing authorization and launch.



#### Samay

# Formerly Respira Labs | University of California, Berkeley | 2019 | www.respiralabs.com

Based in Mountain View, California, Samay intends to stop the progression of and ultimately prevent respiratory diseases by empowering patients, caregivers/families and clinicians with high quality and actionable health information at home. Backed by NSF and NIH, they have developed a patented "acoustic resonance" technology that can detect air trapping, an earlier and more sensitive marker of lung dysfunction. This technology has the potential to accurately diagnose and predict deterioration (exacerbations) 4+ days in advance using low-cost, over-the -counter, sensors (10x cheaper).

In addtion to grants from NSF and NIH, the company has received awards from VentureWell E-Teams Stage 1 and 2, Big Ideas@Berkeley, Big Bang! Business Competition at UC Davis, Cisco Global Problem Solver Challenge, MedTech Color Pitch Competition and ResMed's Entrepreneur in Residence grant program.



#### SandBox Semiconductor

The University of Texas at Austin | 2017 | https://sandboxsemiconductor.com

Founded in June 2016, SandBox Semiconductor's mission is to accelerate manufacturing operations, improve process quality for next generation technologies, and reduce material usage through strategic process development.

A minority- and woman-owned small business based in Austin, Texas, SandBox's technologies have been supported by the National Science Foundation, the National Institute of Standards and Technology, and the Department of Energy to develop its predictive recipe design and analysis capabilities. SandBox Semiconductor received the NSF TECP award to support a strategic collaboration with Siemens in virtual semiconductor manufacturing.



#### Sanergy

Massachusetts Institute of Technology & Babson College | 2010 | http://www.sanergy.com

Sanergy is an alliance of organizations that harness a circular economy approach to empower cities in building carbon-negative systems that offer safe sanitation. They also work to build regenerative food systems through the production of feeds, fertilizers, and fuels from upcycled sanitation and other residual organic waste.

Sanergy was a winner of the U.S. Agency for International Development competition for development ideas, co-funded by the Bill & Melinda Gates Foundation and the U.S. Agency for International Development. The company has received global media attention from Forbes, Voice of America, BusinessWeek, and Scientific American.



#### Sanguina

Formerly Lunula Health | Georgia Institute of Technology | 2018 | https://www.sanguina.com/

Georgia-based Sanguina is at the forefront of developing tools to help you act on your health through accessible science and technology, with an emphasis on anemia screening.

Their AnemoCheck Mobile app is the first-ever mobile app designed for instant, non-invasive hemoglobin estimation. They are collaborating with AstraZeneca on smartphone app study for hemoglobin management in chronic kidney disease patients with anemia.

### 2023 Alumni Success Stories | Rice Business Plan Competition



#### Saranas

#### Rice University | 2013 | www.saranas.com

Saranas has developed a technology that allows for the early detection and monitoring of bleeding complications associated with vascular access procedures.

The Early Bird Bleed Monitoring System includes a vascular access sheath with embedded sensors that measure the electrical resistance across the blood vessel. By sensing a change in the vessel's electrical resistance, the Early Bird is designed to detect and monitor bleeding from a blood vessel accidentally injured during endovascular procedures, such as transcatheter aortic valve replacement, large bore hemodynamic support device placement, or other complex cardiac interventions, where the femoral artery or vein is used to gain vascular access to the heart.

The technology was invented at the Texas Heart Institute.



#### Scan

#### Formerly QR Code City | Brigham Young University | 2011 | Acquired

Founded in 2011, Scan created web and mobile experiences and tools that enabled both enterprises and individuals to benefit from mobile transaction technologies (QR codes, NFC and more). These benefits included mobile web pages, mobile commerce, social media, lead generation and analytics.

In late 2014, Scan was acquired by SnapChat, a social media company based in Venice, California.

#### **SEAAV Athletics**

#### Quinnipiac University | 2021 | https://seaav.com

Boston's SEAAV Athletics makes sustainable athleisureware from plastic bottles. Meet Seaav.

In 3 years, they've diverted over 280,000 plastic bottles from their shorelines through our cleanup initiatives with the Plastic Bank. Select styles of Seaav can be found on The Ellen DeGeneres Show Shop.



#### SeebeckCell Technologies

#### The University of Texas at Arlington | 2020 | www.seebeckcell.com

SeebeckCell Technologies (SCT) develops & manufactures liquid-based thermoelectric modules, power generators, and heat waste recovery systems. SCT's technology enables a 4x higher (Power per Weight) ratio, greener production, scalable solution due to its synthetic materials that do not require mining.

SCT technology utilizes a liquid material compared to solids in current tech, resulting in a significant reduction in the product's weight, addressing needs for new market applications such as blockchain mining, data centers, and space energy generation. SCT's initial products will be a flare gas recovery system and a Mid-temperature heat waste recovery system for pipes. SCT offers "concept-to-completion"" services to businesses for tailor-made solutions to fit their technology.

In 2021, the company participated in the inaugural cohort of Rice's Clean Energy Accelerator and joined Chevron Technology Ventures' Catalyst program.



#### Seismos

#### The University of Texas at Austin | 2013 | http://seismos.com

Headquartered in Austin, Seismos Inc. is a technology provider for the Oil & Gas industry by offering enhanced subsurface intelligence and proprietary data analytics.

Seismos offers completion diagnostics services for the Oil and Gas industry. Seismos products suite delivers the industry's first, non-invasive, direct measurement of fracture properties for real-time fracturing treatment evaluation. Seismos has applied its technology to thousands of stages across U.S. plays. The company has received several awards and industry recognition for its proprietary technology that empowers real-time data-driven actions.



#### Semprus BioSciences

# Formerly SteriCoat | Massachusetts Institute of Technology | 2007, Second Place | Acquired

Semprus Biosciences was a venture-backed biomedical company designing new tools to prevent infection and thrombus-related complications in patients with implanted medical devices. Semprus Sustain Technology is a permanent, nonleaching, biomaterial modification that chemically bonds to the surface of the implant device. The technology vastly improved patient outcomes by preventing serious medical complications such as infection, blood clots, improper healing, and cell overgrowth.

In June 2012, Semprus BioSciences was acquired by Teleflex Inc., a Pennsylvania-based medical device company.

### 2023 Alumni Success Stories | Rice Business Plan Competition



#### SensorHound

#### Purdue University | 2013 | www.sensorhound.com

SensorHound is a vertical-agnostic, resource-efficient operations monitoring solution for the Internet of Things.

SensorHound's mission is to improve the security and reliability of the Internet of Things (IoT). Their suite of software products provides continuous in situ deployment monitoring you can count on, and sends immediate alerts with detailed diagnostic information when software failures or security intrusions are detected. Based on patent-pending technology developed by leading IoT researchers, their award-winning solutions are proactive, automated, and easy to integrate - all with an unbelievably small footprint.

They have received awards from the National Science Foundation, Purdue Research Foundation, The Alchemist Accelerator, Fouder.org, and TiE. SensorHound has offices in West Lafayette, Indiana and Santa Clara, California.

# Sensytec sensing systems technologies

#### Sensytec

University of Houston | 2016 | https://sensytec.com/

Based in Houston, Sensytec's patented technology unlocks unique insights into the performance data of concrete infrastructure throughout its operational life. Their tech introduces process efficiencies, structural health monitoring, and CO2 reduction benefits to their customers.



#### Sentigrate

Formerly Eventigrate | The Katholieke Universiteit Leuven | 2016 | https://www.sentigrate.com/use-cases/eventigrate/

Sentigrate is a data company specialized in processing, modeling and visualizing sensor data. Today, the company is headquartered in Leuven with a wide range of customers from university spin-offs to multinationals. They are active in more than 16 countries and have experience with different types of projects ranging from proof-of-concepts to projects with over 1.5 million sensors.

They have a proven track record when it comes to integrating and combining multi-parameter sensor data and building machine learning methodologies to extract insights and knowledge in a fast and proactive way. Together they can leverage your data into new opportunities. Sentigrate is an Amazon Web Services (AWS) Healthcare partner based in Heverlee, Belgium.



#### SES

Formerly SolidEnergy Systems | Massachusetts Institute of Technology | 2012, Fourth Place | https://www.ses.ai/ | Exit, Public Company

SES (SolidEnergy Systems) is the world's leading researcher, developer and manufacturer of Li-Metal technologies and products. SES can help you design, develop, build, and test Li-Metal cells and modules to help you understand the potential of your future application. Of all the new battery technologies, Li-Metal not only offers 2X energy density, but it has the best overall performance and is the closest to disrupting Li-ion.

Founder Qichao Hu was named to the 2012 Forbes list of 30 Under 30 in Energy. SolidEnergy placed fourth in the 2012 Rice Business Plan Competition and was a finalist in the U.S. Department of Energy's National Clean Energy Business Plan Competition. They are based in Woburn, Massachusetts.

On July 13, 2021, SES entered into an agreement with Ivanhoe Capital Acquisition Corp., a SPAC. They are trading in the NYSE under the ticker symbol SES.



### **Shift Thermal**

Formerly Active Energy Systems | Cornell University | 2018 | https://shiftthermal.com/

Knoxville, Tennessee-based Shift Thermal is commercializing advanced ice thermal energy storage for HVAC, shifting our cooling to be more sustainable, cost-effective, and resilient. They received an Energy Efficiency and Renewable Energy (EERE) SBIR grant in May 2020.



#### **Skylark Wireless**

Rice University | 2016 | http://www.skylarkwireless.com

Skylark Wireless is a wireless networking hardware startup headquartered in the vibrant heart of Houston, TX specializing in Television White Space (TVWS) systems and wireless beamforming or "Massive-MIMO" technologies. Originally founded in 2012 by Ph.D. colleagues in order to provide custom software-defined radio equipment to the research and development market, today they design and manufacture customized radio solutions for addressing the needs of the rural broadband market.

The high cost of fiber and satellite communications, as well as the poor range and capacity of cellular wireless technologies leaves over 40 million Americans and over half of the world without high-speed broadband communications. They believe that high-speed internet access is a great equalizer, providing citizens with vital education, commerce, and entertainment in an increasingly global world.

Skylark's proprietary Faros™ base station is able to provide high-speed multi-user data links over tens of miles wirelessly using Massive-MIMO technologies first developed and demonstrated at Rice University. With your help, they will be piloting their technology alongside their strategic partners in order to start serving end users in the next few years.



#### **SmarterShade**

#### University of Notre Dame | 2011, Fifth Place | Acquired

SmarterShade was a cleantech research company developing new technology for smart glass. Smart glass is an emerging class of clean technologies that uses stable polarizing and retarding films to electronically tint a clear window with the flip of a switch. They placed fifth overall at the 2011 Rice Business Plan Competition.

SmarterShade presented their technology at the White House in June 2015, and the company was chosen as a finalist for the Chicago Innovation Awards. In January 2016, Forbes recognized co-founder Will McLeod as one of their 30 Under 30 in Manufacturing and Industry.

In July 2015, SmarterShade's key human resources and assets were acquired by VG SmartGlass. VG SmartGlass was founded in 2014 specifically to commercialize the technology from SmarterShade.



### **Smoove Creations**

#### Northern Kentucky University | 2021 | https://smoovecreations.com

Smoove Creations gives organizations the ability to create completely customizable footwear in minutes. Using their Smoove studio, customers select their shoe, upload custom artwork, create color schemes, and add custom text. They've innovated a seamless process for customers to design, print, and receive a custom sneaker.

Based in Newport, Kentucky, they're on a mission to make custom footwear the standard for employee incentives and brand expression.



#### Soko

# Formerly SasaAfrica | Massachusetts Institute of Technology | 2012 | http://shopsoko.com

Soko is a women-led, people-first ethical jewelry brand and manufacturing platform built to connect artisans in Kenya with the global marketplace.

They work towards reducing inequality and poverty through the creation of highquality jobs with dignity and purpose. They believe in using business as a force for good to balance profit with purpose. Financial inclusion and economic sovereignty are the keys to lasting impact and change.

They are headquartered in San Francisco, California.



#### Soltage

#### Yale University | 2006 | Acquired

Soltage was a full-service renewable energy company developing, financing, installing, owning, and operating solar power generation assets that provide electricity to commercial and industrial, educational, utility, and municipal customers. The company has more than 50 solar projects and more than 150 MW of generation capacity under management across eight states and has deployed more than \$350 million into solar generation projects since 2006.Co-founders Vanessa Stewart and Jesse Grossman were finalists for Ernst & Young Entrepreneur of the Year, New Jersey in 2011.

Soltage was acquired by Tenaska Capital Management through an LBO in March 2015.



#### Speeko

#### The University of Iowa & University of Chicago | 2019 | www.open.speeko.co

Speeko — A.I. Speech Coach app improves public speaking skills, from seasoned Toastmasters to beginners on the journeyTrack your voice and speech patterns in real-time. Simple, friendly alerts keep you speaking your best. Everywhere your voice is. An intuitive interface makes it easy to see where you can improve. Speeko analyzes your pace, tone, words, and more.

They are based in Chicago.



# spotLESS Materials Pennsylvania State University | 2019, Third Place | www.spotlessmaterials.com

spotLESS Materials engineers anti-fouling technologies that provide innovative solutions to sticky problems across numerous industries. Based in State College, Pennsylvania, spotLESS Materials makes advanced materials for water sustainability and sanitation applications. Their coatings repel liquid, sludge, bacteria, and more.

The team was part of the 2019 Summer cohort at Y Combinator and a finalist in the 2020 P&G Ventures CES Challenge. They placed third at the 2019 Rice Business Plan Competition and are based in State College, Pennsylvania.



#### Spouts of Water

#### Formerly SPOUTS of Water | Harvard University | 2014 | https://spouts.org/

SPOUTS provides access to safe and clean drinking water through the production and distribution of ceramic water filters. Their vision is to provide access to clean and safe drinking water for all East Africans.



#### **Sproxil**

#### Formerly mPedigree Logistics | Dartmouth College | 2009 | www.sproxil.com

Sproxil uses mobile technology and a proprietary fraud detection platform to launch secure, data-driven consumer engagement programs globally. Sproxil's solutions are deployed by multinational manufacturers and brands across multiple industries to prevent supply chain fraud, amplify brand awareness, and optimize marketing spend. With teams of experts in Africa, Asia and America, Sproxil has executed projects across five continents and has the ability to offer services in over 100 countries worldwide.

Cambridge, Massachusetts-based Sproxil is ISO 9001 and ISO 27001 certified.



#### Stasis Labs

#### University of Southern California | 2015 | https://www.stasislabs.com

Most hospital patients around the world are only seen by a nurse once every six hours. Due to the high cost and complexity of existing monitoring devices, these vulnerable patients are left alone without even a vitals monitor. Tragically, up to 75% of injuries and deaths in hospitals happen to these patients who lack basic medical supervision.

Stasis has built a cloud-connected vital signs monitoring system that rescues these patients. They are expanding access to a fundamental tool of modern medicine to the 11 million under-monitored beds around the world.

Stasis was a part of the first cohort of the Techstars Healthcare Accelerator, in Partnership with Cedars-Sinai. They received endorsement by the International Finance Corporation, part of the World Bank Group, to help improve and expand the reach of medical technology worldwide. Their monitors are currently live in Indian hospitals, and they continue to deploy their system in India as they prepare to expand their life-saving solution across the globe.



#### Stitch3D

Formerly Candelytics | Harvard University | 2021, Fourth Place | https://www.stitch3d.io

Boston-based Stitch3D is a 3D data hosting platform that provides users with access to ultra fast 3D rendering and advanced analytics.



#### SuChef

#### University of Pennsylvania | 2022 | https://www.suchef.xyz/

SuChef is a community for incredible cooking experiences. SuChef helps people cooking at home whip up delicious and healthy meals. SuChef supports home cooks with meal inspiration, planning, grocery purchasing, food prep and cooking. They do this by partnering directly with a diverse set of chefs and food creators on their platform to design recipes, lead tutorials and classes; enabling them to earn a meaningful income from their fans unlike existing creator platforms today.



## Surgical Innovation Associates Formerly SurgiNet | Northwestern University | 2016 | Acquired

Surgical Innovation Associates (SIA) is an early growth-stage medical device spinout from Northwestern University with FDA 510(k) clearance, CE Mark, and >\$1M revenue run rate for its first product, DuraSorb $^{\text{TM}}$  - a patented absorbable surgical mesh for reconstructive and plastic surgery. SIA was recently awarded a non-dilutive National Cancer Institute SBIR Phase II grant to complete an IDE study that will expand the current labeling.

In December 2022, SIA was acquired by Princeton, New Jersey-based Integra Lifesciences Holdings.



#### **Swift Coat**

#### Arizona State University | 2017, Fourth Place | www.swiftcoat.com

Swift Coat uses nanoparticles to keep solar panels clean and operating at their maximum efficiency. When solar panels get dirty, they can produce 30% less power. For the average homeowner, that's enough lost energy over the course of a month to power their air conditioner for 52 hours! Swift Coat has developed a nanoparticle based coating that when applied to the surface of the panel uses UV light from the sun to power a chemical reaction that decomposes the dirt that builds up on the panel keeping it clean and operating at its maximum efficiency.

The company has received federal research grants and has negotiated a license agreement. They are based in Tempe, Arizona.



#### SwiftSku

### Auburn University | 2021, First Place | https://swiftsku.com

SwiftSku is a mobile backoffice provider for convenience stores. Based in Birmingham, Alabama, they were part of Y Combinator's 2022 cohort.



# SXD Formerly Shelly Xu Design | Harvard Business School | 2021 | https://www.sxd-ai.com

SXD combines design and patent-pending tech to turn fabrics into zero waste products. The resulting zero waste designs consume less material, enable significant cost savings, and look better. SXD has been featured in publications such as Elle, Harper's Bazaar, Women's Wear Daily, Business of Fashion, Yahoo and InStyle. Harper's Bazaar Japan named SXD a company Redefining the Fashion Ecosystem. SXD also became the first design oriented startup to win numerous prizes around the world, including Grand Prize at the Harvard Business School New Venture Competition and the Top World Innovative Technology at South x Southwest.

In the last year, they closed seven projects with brands from Allbirds to the Harvard Innovation Labs, switching their best sellers and merch products to zero waste ones. Recent milestones include: 1. they were named Top Innovative World Technology at SXSW, demonstrating that they can inspire global partners to make this switch; 2. they enabled 10x fabric savings in a pilot for a top fashion brand translating to 40K meters of fabric savings and over \$140K in cost savings, proving that zero waste designs can have massive environmental and economic benefit; and 3. they proved that zero waste designs can empower communities of garment workers by transferring cost savings to pay climate refugee seamstresses 2-4x the local wage.

Their work also brought in inbound interests and they are now finalizing negotiations with three multi-billion-dollar American brands to turn their biggest products to zero waste. They closed their oversubscribed pre-seed round. Their standalone software isn't officially launching until later this year, but they've already driven six figure revenue in the last months through pilots alone.



Syntr Health Technologies Formerly Syntr | University of California, Irvine | 2018 | http://www.syntrhealth.com/

Syntr Health Technologies, Inc is a start-up company that was founded by biomedical engineers and experienced surgeons. Together, they have developed and tested a processing device, the SyntrFuge™ System, for the microsizing of adipose tissue for body contouring.

How microfat is processed is incredibly important to its viability. The SyntrFuge System utilizes the precision of automation to deliver dependable results every time. They are on a mission to empower practices to offer innovative and natural solutions for their patients. In spring of 2023, the Irvine, California-based company took home the MassChallenge 2023 Alumni Award.



#### Takachar

#### Massachusetts Institute of Technology | 2013 | http://takachar.strikingly.com

Most crop and forest residues (biomass) are loose, wet, and bulky, making them very expensive to collect and transport. As such, many rural communities are often shut out from the bioeconomy, and their only recourse is to burn the local residues in open air. This creates significant air pollution as well as risks for catastrophic wildfires.

Takachar develops small-scale, low-cost, and portable systems that can latch onto the back of tractors and pick-up trucks, and deploy to rural, hard-to-access communities to locally upgrade and densify residues on-site into higher-value, carbon-negative bioproducts such as fertilizer blends, biofuels, and chemicals. The process requires no external energy or heat to run. Their goal is to create a network of self-sufficient rural communities less dependent on unreliable imported supply chains for their essential chemical commodities. By doing so, they create localized unskilled jobs and promote environmental justice.



#### **Taxcient**

### Formerly vAudit Group | San Diego State University | 2004, Fifth Place | Acquired

In business for six years, Taxcient was a sales and use tax compliance software provider. The company was founded with the intent of relieving corporate tax departments of the time consuming and costly effort required to report sales and use tax across multiple jurisdictions. Designed by former state tax auditors, the software provided an alternative to the administrative burden of state and local tax compliance. The software was trusted by some of the leading companies in the world to provide accurate sales tax compliance with minimal cost.

In 2010, Taxcient merged with Avalara, the leading provider of web-based sales tax automation. The merger marked a major milestone in the companies' common quest to revolutionize the sales and use tax management industry via the application of leading-edge technology and top-flight tax knowledge and expertise.



#### TCPoly

#### Georgia Institute of Technology | 2017 | www.tcpoly.com

TCPoly manufactures advanced heat recovery and thermal energy storage products that are used to reduce energy consumption and time-shift loads (to avoid peak pricing) in commercial buildings. Their technology combines advanced manufacturing and materials to create products that can reduce the associated carbon emissions and cost of operating a commercial building.

TCPoly is a graduate of the Innovation Crossroads Program at Oak Ridge National Labs and is funded by Engage Ventures, the Georgia Research Alliance, the National Science Foundation and the Department of Energy.



#### **Teale**

#### Texas A&M University | 2022 | https://www.teale.ai

Teale's mission is to further accelerate the digital transformation of the energy industry. The energy sector, an essential driver of the world's economy, faces a key challenge in meeting the growing demand for energy delivered in a safe and environmentally responsible manner. Teale strives to bridge this gap by leveraging advanced technologies and innovations.



# Team Real Talk University at Buffalo | 2022 | https://www.teamrealtalk.com/

Based out of Buffalo, New York, Team Real Talk, Inc. is a certified B-corporation that aims to help organizations quantify and scale Diversity, Equity, and Inclusion (DEI) efforts by taking a grassroots approach that will ultimately contribute positively to the company's bottom line by reducing voluntary attrition, one real talk at a time.

Through their custom 6R Framework following the BOPPPS behavioral change model, they take participants through a self-guided learning process as everyone has a different starting point when it comes to access and equity-based practices. Their goal is to make DEI continuous – where participants undergo modules in intimate teams collectively analyzing topics that connect to their professional disciplines. Their platform is focused on increasing participation, engagement, and comfortability through discussing and solving societal issues, one real talk at a time!



# The Eye Tribe Formerly Senseye | IT University of Copenhagen | 2012 | Acquired

The Eye Tribe is an award-winning innovator of eye tracking technology and an OEM (original equipment manufacturer) technology partner that delivers fast, affordable solutions for integrating eye tracking into Virtual Reality/Augmented Reality smartphones, tablets, computers, automotive, TV, entertainment, and gaming devices. The Eye Tribe software enables touchless interaction and control of consumer devices, eye-based authentication, and visual attention analytics. The Eye Tribe's software is unique, because it relies only on low-cost components. They combine their proprietary software with OEM hardware, using only standard components that can be integrated into the next generation of consumer devices.

The Eye Tribe was founded in 2011 and received many awards for its technology innovations, including five Innovation Awards at the Consumer Electronics Show and being a finalist in Sir Richard Branson's Extreme Tech Challenge 2015.

The Eye Tribe was acquired by Oculus in December 2016. Oculus is owned by Meta.



#### **TheraNova**

Formerly Induction Therapy Technologies & Gastric Retention Technologies | Duke University | 2003 | www.theranova.com

Located in San Francisco California, TheraNova is a medical device development company focused on developing solutions to large markets with unmet needs. TheraNova accomplishes this through its mission to improve outcomes, decrease costs and expand access to healthcare.



#### **TransCrypts**

University of Toronto & Harvard University | 2022 | https://www.transcrypts.com/

Palo Alto-based TransCrypts is a tool for Human Resource Departments to automate the issuance of employment and income verification documents using the blockchain. Their proprietary process not only saves HRs time, money, and headache in dealing with compliance but also gives employees total control over how their work information is being shared. Recently, TransCrypts has helped more than 4,000 Ukrainian refugees gain access to their medical records, and found an almost 40 percent increase in the quality of their healthcare.



## Tri-D Dynamics Purdue University | 2017 | Acquired

Tri-D Dynamics designs and produces (via Cold Metal Fusion printing) smart metal pipes that sense temperature and pressure in harsh industrial environments. They are using the underlying manufacturing technology of their rocket engines to develop high-volume products for the energy industry.

Over the past year, the company created a proprietary Cold Metal Fusion process that allows for the seamless integration of electronics into metal. This enables real-time data collection in harsh environments where protecting the sensing technology is a requirement.

In September 2020, Tri-D Dynamics was voted one of the Ten Most Promising Companies at the Rice Alliance Energy Tech Venture Forum. They were also the March 2021 cover story in The Tube and Pipe Journal.

In July 2021, Tri-D was acquired by Melbourne, Australia-based Titomic Limited.



#### **TriboTEX**

Washington State University | 2015 | http://www.tribotex.com, https://shop.tribotex.com

Founded in Pullman, Washington by Dr. Pavlo Rudenko, Ph.D. CTO, TriboTEX offers a clean alternative to currently available lubricating blends that improve mechanical output by utilizing a self-assembling, nano-structured coating to simultaneously reverse wear while enhancing lubrication.

Having achieved traction through various business plan competitions and obtained funding from various institutions including the National Science Foundation (NSF), American Society of Engineering and Education TriboTEX has grown to develop a working prototype that is primed for commercialization and is currently pursuing further funding in order to produce products at a volume that will allow for sustained growth and continued success among target markets. With a broad range of applications, TriboTEX's thin film-forming lubricating blends offer the highest potential value to the automotive and wind power industries.



### TriFusion Devices Texas A&M University | 2016, First Place | Acquired

Trifusion fabricates custom 3D printed prosthetic and orthotic devices for the biomedical device industry, healthcare, military, and commercial manufacturing industries.

They recently formed an exclusive partnership with a Silicon Valley 3D scanning company, allowing them to focus on printing and with Baylor College of Medicine, who is performing clinical trials on TriFusion's devices. TriFusion secured their first IRB approval and sold over 50 devices in the first month and a half of product sales. They expect to sell more than 3,000 devices in their first year, 2017. Rotary International has selected TriFusion to help deliver 3D printed prosthetic devices to clinics overseas. The company expects to deliver the first devices to a clinic in Tanzania before the end of 2017. They won first place at the 2016 Rice Business Plan Competition.

In October 2016, Essentium Materials acquired TriFusion. The Essentium team competed in the 2010 RBPC as Whole Tree. They are headquartered in Austin, Texas.

#### **TuneHatch**

#### TuneHatch

Vanderbilt University | 2022 | https://tunehatch.com

Based in Nashville, TuneHatch transforms the live music space by empowering everyday people and venues to host amazing music experiences with local independent artists. They take the hassle out of booking, and ticketing through their innovative online platform. Follow the journey on social media (@tunehatch). Artist, fan, or venue? Register for free at TuneHatch.com to discover shows, artists, booking opportunities, and more.



#### **Tutorfly**

#### University of California, Los Angeles | 2019 | Acquired

The Tutorfly team provides easy access to peer tutoring by collaborating with students, teachers, parents, as well as education technology experts in the community. Their tutors are current high school and university students who continue to excel at their studies and understand the way students of this generation learn. The best way for students to improve their academic performance is with a peer who underwent the same academic experience.

Australia-based Kip McGrath Education Centres acquired Tutorfly in 2021.



#### **Twelve**

#### Formerly Opus 12 & Obtainium | Stanford University | 2015 | http://www.opus-12.com

Twelve is the carbon transformation company, a new kind of chemical company built for the climate era. They make essential products from air, not oil. Their groundbreaking technology eliminates emissions by transforming CO2 into critical chemicals, materials and <u>fuels</u> that today are made from fossil fuels. They call it carbon transformation, and it fundamentally changes how they can address climate change, reduce emissions and reverse the carbon imbalance.

Reinventing what it means to be a chemical company, they're on a mission to create a climate positive world and a fossil free future through the power of chemistry.



#### Tympanogen

#### Tulane University | 2014, Fifth Place | www.tympanogen.com

Tympanogen is a medical technology company that develops ear, nose, and throat (ENT) devices and wound-healing therapies. Their products aim to simplify existing procedures and improve treatment outcomes.

In the ENT space, their Perf-Fix nonsurgical gel patch is intended to replace traditional tympanoplasty procedures with quick office visits. They also conduct research aboard the International Space Station that advances both the material science and space medicine fields.



#### VasoCorp

#### University of West Georgia | 2017 | http://www.vasocorp.com/

VasoCorp is an independent supplier of high quality health products. Their products are sold in Walmart, CVS, and Walgreens.



#### VenoStent

#### Vanderbilt University | 2016 | https://www.venostent.com

VenoStent is a venture backed, clinical stage medical device and tissue engineering company that's developed bioabsorbable polymer scaffolds in order to vastly improve vascular surgery outcomes.

In May 2023, FDA granted VenoStent Breakthrough Device Designation for its novel technology, the SelfWrap® Bioabsorbable Perivascular Wrap.



## Veran Medical Technologies Vanderbilt University | 2003 & 2004, Third Place | Acquired

Veran Medical Technologies developed and commercialized an FDA-cleared, next generation electromagnetic thoracic navigation platform called the SPiN Thoracic Navigation System $^{\text{TM}}$ .

Veran's breakthrough technology has been adopted by leading cancer centers throughout the United States. Veran provides physicians with a full line of bronchoscopic brushes, needles, forceps, and steerable catheters with tiny electromagnetic sensors embedded in the tips for precise navigation. The combination of these proprietary Always-On Tip Tracked® instruments and Veran's exclusive patient respiratory gating technology enables physicians to accurately access lung nodules by accounting for nodule movement during patient breathing, a common challenge for lung specialists. Veran Medical Technologies placed third in the 2003 Rice Business Plan Competition.

In December 2020, Veran was acquired by Pennsylvania-based Olympus Corporation of the Americas (OCA)—a wholly owned subsidiary of Olympus Corporation in Tokyo, Japan. Olympus develops and commercializes innovative optical and digital solutions. This acquisition will expand the Olympus portfolio of respiratory products.

### **VibroniX**

#### **Vibronix**

#### Purdue University | 2016 | www.vibronixinc.com

Vibronix is devoted to developing advanced imaging and sensing technologies for disease diagnosis and treatment. Vibronix provides innovative integrated solutions for fast and precision surgery with interwoven ideas in vibrational spectroscopy, optical & acoustic imaging, augmented reality, and machine learning. Vibronix aims to benefit patients worldwide by pushing the accuracy and efficiency in healthcare services.

The company's scientific and technical innovations and promising value for entire healthcare system has been recognized by multiple National Science Foundation/National Institutes of Health grants and partnerships with several top research institutes/companies. Their surgical guidance system AcuSee received FDA 510(k) clearance in October 2020.



### Vita Inclinata Technologies Mitchell Hamline School of Law | 2019, First Place | www.vitatech.co

Founded in 2015 to solve a real problem, Vita today controls chaotic swinging and spin and adds safety and precision for rotor-wing and fixed-wing aircraft and cranes. With the mission of "Bring them home, every time," Vita's technology changes the narrative while saving lives, time, and money across industries, including search and rescue, military, firefighting, public safety, construction, wind energy, and oil and gas. The company is headquartered in Broomfield, Colorado, with offices in Washington, DC, and Huntsville, Alabama



#### **VRapeutic**

#### University of Ottawa | 2021 | https://myvrapeutic.com

VRapeutic is a UNICEF Innovation Fund portfolio software house, specializing in the development of rehabilitation and therapeutic solutions, with a focus on virtual reality for developmental and learning special abilities, including autism and ADHD. They design innovative VR experiences that incorporate bio-sensing and artificial intelligence to enhance the quality of therapy sessions. They empower therapists to deliver personalized content, using supervised sessions, and to track the impact of the therapy plan/program in light of the short-term and the long-term progress achieved by the users/children. Their content is science-backed, and delivered under the supervision of experienced physicians and therapists. VRapeutic offers its services through public hospitals, rehabilitation centers, and private clinics.

VRapeutic is a UNICEF Innovation Fund portfolio company since June 2020, and an alumna of FLat6Labs Cairo and Invest Ottawa's pre-Accelerator Program. VRapeutic is also participating in the University of Ottawa's MakerLaunch Program and has been chosen to participate in the prestigious ONtrepreneurs Program of Ontario Brain Institute. In 2022, Yuram, one of VRapeutic's products, has started rolling out the service of administering various assessments and tests in Cairo and Alexandria.



# WCB Robotics Birla Institute of Technology & Science, Pilani | 2018, Seventh Place | https://wcbrobotics.com/

WCB Robotics is developing ELMO- Extremely Lightweight Mobile Operator. They believe in making world class robots that are robust, light weighted, and are backed up by the patented aerodynamic seal technology. WCB Robotics is refining their product based on tests conducted with an early prototype. Demos with potential customers using the current prototype indicate very good product market fit. Recently, WCB Robotics's patent was accepted by Singapore and China in addition to the USA. WCB Robotis has filed three additional patents that cleared PCT with no questions asked.



#### WiPower

#### Massachusetts Institute of Technology | 2007 | Acquired

During its four years in business, WiPower Inc. was widely recognized as the technology leader in the wireless power marketplace. The company developed and commercialized the world's first wireless charging systems capable of extended range charging, insensitive to the position and orientation of receiving devices relative to a charging station. They distributed its commercial and industrial product solutions across the United States and in Japan. WiPower filed 17 U.S. patents related to wireless power technology and counted numerous FORTUNE 500 companies among its customers.

In 2010, WiPower was acquired by Qualcomm for an undisclosed amount.



#### WISE Systems

#### Harvard University | 2015 | https://www.wisesystems.com

Wise Systems is an Autonomous Dispatching and Routing solution that empowers operations teams and drivers to improve fleet efficiency and customer service, seamlessly adapting to the everyday challenges they encounter. Automatically schedule routes, monitor routes in progress, and watch the system intelligently adjust to day-of delays.

Cloud-based with machine learning, Wise Systems is an all-in-one platform that can be used on its own or one module at a time. Bring more dynamic and responsive routing to your fleet today.



#### Woobie

#### Brigham Young University | 2022 | https://www.woobie.ai/

Woobie builds apps for frontline workers. They are primarily focused on private equity owned groups in the dental industry but also working with other Private Equity owned businesses including commercial building services.

The company recently pivoted away from subscription to ad-supported modal for their Dental Dash product. This increases the value of each active user on the platform while reducing the friction in acquiring new B2B accounts.



#### Wunderite

#### Boston College | 2018 | www.wunderite.com

Wunderite developes a collaboration solution for insurance agencies and their customers. The company is based in Boston, Massachusetts.



#### **Zibrio**

#### Formerly iShoe | Harvard University | 2009 | www.zibrio.com

ZIBRIO is commercializing space technology to save the world from falling down. Falling is the number one reason for trauma death, resulting in \$50B in medical costs every year—and projected to double in 10 years. The ZIBRIO SmartScale is a quick, easy way to measure weight, balance and fall risk by simply standing. A precision measurement, the balance score predicts a fall in the next 12 months and gives your risk trajectory for the next 30+ years. Personalized physician recommendations to help patients improve are provided in accompanying software. With use of ZIBRIO technology, a 54 percent reduction in falls was observed, which translates into billions of dollars in cost-savings.

The company opened a production facility in Omaha, Nebraska, and scale deliveries began in January 2022. ZIBRIO is based in Houston, Texas.



#### **Zilper Trenchless**

#### Massachusetts Institute of Technology | 2019, Fifth Place | Acquired

Zilper Trenchless developed an Assisted Dynamic Boring tool. Zilper's proprietary technology is a versatile and cost-efficient trenchless solution designed to install a wide range of metal casings diameters under most soil conditions without significant investment in downhole tools or cutting heads. Their machine uses both pneumatic and hydraulic force combined with a retractable auger to simultaneously install subsurface pipe and clear dirt. Their machines are uniquely able to install critical utility infrastructure through nightmare geologies such as flowing sands, cobbles and high water table environments. Graduates of the Heritage Group's Techstars program, the company focused their operation in Columbia. Zilper Trenchless placed fifth at the Rice Business Plan Competition.

In September 2022, Zilper Trenchless was acquired by San Fransisco -based Petra. Petra will begin manufacturing Zilper's technologies in the United States introduction to the U.S. and European Markets in early 2023.



#### **Ziosk**

### Formerly TableTop Media | Southern Methodist University | 2006 | http://www.ziosk.com

Based in Dallas, Ziosk® is the creator of the first entertainment, ordering and pay on demand tablet for table service restaurants. The new generation of Ziosk tablets feature 8-inch touchscreens with encrypted credit card readers built to accommodate the latest secure payment technology including EMV and NFC. The tablets reside on each table, enabling guests to see menu items, play games, view news and entertainment, order food and beverages and pay on demand; all of which gives guests control over their dining experience. The pay on demand platform enables other benefits like labor efficiency, increased sales, guest insights and greater guest frequency for restaurants to better run their business.

Ziosk is currently working with large casual dining chains and is observing positive results from the guests, sponsors, and restaurants. With 180,000 devices on restaurant tables, the company has processed over \$22 billion transactions and served over 2.5 billion guests.