

GCEC 2019 Award Nomination

Award 2: Outstanding Contributions to Venture Creation



Submitted on behalf of the University of Illinois at Urbana-Champaign

Illinois Entrepreneurship Ecosystem:

A collaboration of the following campus units: Origin Ventures Academy for Entrepreneurial Leadership (Gies College of Business), Technology Entrepreneur Center (Grainger College of Engineering), EnterpriseWorks Incubator at the Research Park, Office of Technology Management & IllinoisVENTURES.

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The Illinois Entrepreneurship Ecosystem: Collaborative Support for Venture Creation

The University of Illinois at Urbana-Champaign has developed a robust and synergistic entrepreneurship ecosystem in which key campus partners collaborate successfully to support venture creation by university-affiliated startups (see Appendix A). Primary partners that support venture creation in the Illinois Entrepreneurship Ecosystem include Origin Ventures Academy for Entrepreneurial Leadership (Gies College of Business), Technology Entrepreneur Center (Grainger College of Engineering), EnterpriseWorks at the Research Park, Office of Technology Management, and IllinoisVENTURES. According to 2018 PitchBook Universities Report, Illinois is among the top 10 university producing VC-backed entrepreneurs, top 5 among public universities, top 5 producer of unicorns, top 10 for exits, #13 for serial entrepreneurs, and top 20 for female founders.

Origin Ventures Academy for Entrepreneurial Leadership: iVenture Accelerator

Origin Ventures Academy for Entrepreneurial Leadership operates the iVenture Accelerator, an educational accelerator that enables student startups to create economic and social value by supporting teams with knowledge, seed funding, mentoring, networking opportunities, and access to resources in the Illinois Entrepreneurship Ecosystem. The program is open to students of all disciplines and levels (first year to doctoral), and its goals include 1) facilitating student learning and development, 2) supporting venture growth and success, 3) promoting community building with alumni, and 4) shifting campus culture toward collaboration in support of entrepreneurship education.

Startup teams receive \$2,500 stipends for up to four members and a \$10,000 capacity-funding grant. The accelerator includes a 10-week full-time summer program with access to co-working space, educational workshops, NSF I-Corps training, office hours with mentors, entrepreneurs, social innovators, industry and technical experts, and immersion trips to learn about the entrepreneurship ecosystem in Chicago and to network with mentors and investors. Venture teams pitch to investors at Demo Days in Chicago and Champaign-Urbana at the end of the summer program. Student startups continue their entrepreneurship education during a 2-semester seminar course, complete with access to exclusive resources, events, mentoring, and networking opportunities with an extensive community of alumni advisors, industry experts, and venture capitalists in Chicago and Champaign-Urbana.

iVenture Accelerator engages the community (faculty, alumni, mentors, and funders) in all key activities and networking events to support venture teams and entrepreneurs. This includes serving as judges for pitch competitions, inspirational speakers, facilitators of skill-building workshops, and mentors to provide teams with support and constructive feedback.

Since inception in 2015, iVenture Accelerator has supported 200+ student fellows (representing 9 different colleges and over 50 majors) and incubated 65 student ventures (11 full-time in Chicago). These startups have raised \$8.5M+ for their work and have hired 31 full-time employees. In addition, student teams have made important strides with social impact ventures, such as the work of MakerGirl in encouraging confidence in STEM education for 7-10 year old girls across the country. The impact of iVenture Accelerator startups and positive outcomes attributed to the Illinois Entrepreneurship Ecosystem have been featured in numerous press articles (see Appendix B).

Technology Entrepreneur Center: Cozad New Venture Challenge, Illinois Innovation Prize, and Intellectual Property Clinic

Created in 2000 in the Grainger College of Engineering, the Technology Entrepreneur Center (TEC) provides students and faculty with the skills, resources, and experiences necessary to become successful entrepreneurs. Programs serve students across campus and encourage intersections between engineering and other disciplines. In addition to courses, five certificate programs, and a degree in Innovation, Leadership, and Engineering Entrepreneurship, TEC offers venture competitions, workshops, and other co-curricular events to expose students to concepts in technology innovation and market adoption. TEC administers and collaborates with partners on the annual Cozad New Venture Challenge, Illinois Innovation Prize, and Intellectual Property Clinic.

The Cozad New Venture Challenge encourages students to innovate and create new businesses. In its 20th year, Cozad has engaged 1,200+ teams, 2,000+ students, and awarded over \$1.7M in cash and in-kind prizes. Teams of students are encouraged to create a venture around an idea of their choice, and they participate in workshops, assignments, mentorship, and events to guide them through the startup process. Teams who make it to the finals round of competition have the opportunity to meet with venture capitalists, early-stage investors, and successful entrepreneurs who serve as judges. In spring 2018, teams competed for over \$225,000 in funding and in-kind prizes.

The Illinois Innovation Prize has been awarded annually to the most innovative student on campus for the past ten years. The winning student is a creative and passionate innovator, working with world changing technology, entrepreneurially minded, and a role model for others. Since 2007, student innovators have received \$280,000 from the Illinois Innovation Prize. Many of the winners also were active participants in other programs in the Illinois Entrepreneurship Ecosystem.

The Intellectual Property Clinic launched in 2008 as a joint effort between TEC and the College of Law. Selected participants from the Cozad New Venture Challenge, iVenture Accelerator, and the Illinois Innovation Prize can have a patent application drafted for them at no cost, if their invention description includes a novel and potentially patentable device, system, or method. The value created is worth at least \$10,000-\$12,000 per patent application for each startup team. Innovators work with third-year law students (under faculty supervision) to give them the information needed to author the applications. The IP clinic has expanded to include a Trademark Track, which pairs law students with student startups to advise on trademark issues and prepare applications. To date, 40 patent applications have been drafted for Illinois student innovators, providing over \$430,000 in pro bono legal services.

EnterpriseWorks Incubator at the Research Park

EnterpriseWorks, the Research Park's 43,000-square-foot business incubator for early-stage technology firms, is operated by the University of Illinois to help launch successful startup companies. Since it launched in 2003 with \$8M in state funding, it has incubated more than 250 startup companies (58% founded by Illinois faculty; 20% by students or recent alumni; 11% by others; 9% by staff). The startup companies have raised more than \$1 Billion in venture capital investments and have been awarded \$139.9M in SBIR/STTR federal small business research grants (30% of all SBIR/STTR grants awarded annually in the state of Illinois). EnterpriseWorks includes 24 wet labs, offices, and event spaces for the Research Park tech community. The Research Park routinely hosts technology and entrepreneurship education events. EnterpriseWorks manages an Entrepreneur-in-Residence Program, the I-Start program to provide seed funding, and the NSF I-Corps training site. EnterpriseWorks also manages an EDA funded Illinois University Incubator Network and small business technical assistance program for

startups in downstate Illinois. In Fiscal Year 2018, EnterpriseWorks committed \$841,112 to personnel, Entrepreneurs-In-Residence, and EDA and SBIR consultants to drive entrepreneurial productivity.

Office of Technology Management

The role of the Office of Technology Management (OTM) is to transfer innovations from University of Illinois research into public use by protecting and licensing University intellectual property. In FY18, there were 201 disclosures, 240 U.S. patent applications filed, 66 U.S. patents issued, and 45 licenses and options, including seven first licenses to start-ups. More than 56 active start-ups are currently licensing University intellectual property (42 located in Illinois). Of the 201 disclosures, 60% are affiliated with Grainger College of Engineering. OTM supports entrepreneurship through several programs including technology showcases (Share the Vision and Illinois Ignite), and the Illinois Proof-of-Concept program which funds research projects that demonstrate an innovation's market viability to potential investors and partners. Since 2009, University of Illinois has invested \$1.7M in proof-of-concept projects aimed at advancing University innovation to the marketplace. These programs have helped facilitate a strong launch for 15 start-ups that have gone on to raise more than \$100M in funding.

IllinoisVENTURES

IllinoisVENTURES launched in 2002 to catalyze the creation of research-derived tech startups from the University of Illinois (faculty, students, alumni). Proof of Concept (POC) and Seed funding helps startups build commercial prototypes, validate target markets, refine business models, recruit key management, and position the company for Series A investment. IllinoisVENTURES currently invests up to \$200,000 in seed-stage opportunities, often as the first or one of the first outside investors in a promising technology-based startup. Over the past fifteen years, IllinoisVENTURES has led or collaborated on the initial funding of 90+ new ventures spanning a broad spectrum of scientific and technological innovation. Companies in the portfolio employed 459 people last year (194 in Illinois; 265 outside of Illinois). Total Third Party Investment in the portfolio tops \$1.44 Billion. For every \$1 IllinoisVENTURES invested, others invested approximately \$26 of additional funding to advance venture development.

Illinois I-Corps

The National Science Foundation's Innovation Corps (I-Corps) is a public-private partnership program that teaches university faculty and student entrepreneurs with a targeted curriculum to identify valuable product opportunities that can emerge from academic research. The Illinois I-Corps Site is a collaboration between the Technology Entrepreneur Center and EnterpriseWorks at the Research Park, with participation from the Office of Technology Management and IllinoisVentures. Faculty and students working on technology innovations can participate in I-Corps and receive up to \$2,000 to engage in customer discovery and validation. The Illinois I-Corps Site offers four cohorts per year (two per semester). The program consists of three workshops over six weeks, and teams work to validate the market size, value propositions, and customer segments for their innovations. Upon completion of the program, teams can apply to the National I-Corps program where they receive \$50,000 and participate in a rigorous 7-week program. To date, 120 teams have participated in I-Corps, providing 250+ students and faculty with evidence-based entrepreneurship education. Teams have raised \$45M (\$32M venture capital; \$11M SBIR funding; \$2M other) and have hired 130+ employees. For every \$1 invested in the program by the National Science Foundation (\$300K total) and Grainger College of Engineering (\$30K total), teams have raised \$129.

Appendix A: The Illinois Entrepreneurship Ecosystem at a Glance

HOW THE **Entrepreneurship Ecosystem at Illinois** CAN WORK FOR YOU



ENTREPRENEURSHIP DISCOVERY

- **Entrepreneurship Courses, Certificates and ILEE BS Degree** ▶
- **Entrepreneurship Treks**
 - Silicon Valley Entrepreneurship Workshop ▶
 - Chicago Entrepreneurship Workshop ▶
 - ThinkChicago ▶
- **Innovation Living-Learning Community (Innovation LLC)** ▶
- **Technology Disclosure** ▶
- **Entrepreneurship Forum** ▶
- **Entrepreneurship Lectures and Workshops**
 - V. Dale Cozad Lecture ▶
 - Startup Cafe ▶
 - How I Failed Lecture Series ▶
- **Entrepreneurship Student Organizations**
 - Founders ▶
 - EntreCORPS ▶
 - Entrepreneurs Without Borders ▶

COMPANY FUNDING

- **AWARE (Accelerating Women And underRepresented Entrepreneurs)** ▶
- **IllinoisVENTURES: Venture Capital Outreach** ▶
- **Urbana-Champaign Angel Network (UCAN)** ▶
- **SBIR and STTR Technical Assistance Program** ▶
- **Share the Vision: Innovation and Startup Showcase** ▶

GROWTH & CUSTOMERS

- **CEO Roundtable** ▶
- **Chicago Innovation Exchange (CIE) and Illinois Partnership** ▶
- **Entrepreneurs-in-Residence (EIR)** ▶
- **Incubation at EnterpriseWorks** ▶
- **Research Park Corporate Startup Intros** ▶

STARTUP IDEATION & VALIDATION

- **Faculty Entrepreneurial Fellows (FEF)** ▶
- **Illinois Innovation Prize (IIP)** ▶
- **Intellectual Property Clinic** ▶
- **Illinois Proof-of-Concept Program (I-POC)** ▶
- **SocialFuse: Find Teammates** ▶

COMPANY & TEAM FORMATION

- **Cozad New Venture Challenge** ▶
- **NSF I-Corps at Illinois** ▶
- **I-Start Entrepreneur Assistance Program** ▶
- **iVenture Accelerator** ▶
- **Office of Technology Management Licensing** ▶

INNOVATION SPACES

- **EnterpriseWorks** ▶
- **Grainger IDEA Lab (Innovation, Discovery, Design, & Data Laboratory)** | go.illinois.edu/idealab
- **Research Park** ▶
- **Siebel Center for Design** | designcenter.illinois.edu
- **Maker Spaces at Illinois**
 - **Illinois MakerLab** | makerlab.illinois.edu
 - **CU Community FabLab** | cucfablab.org
 - **ECE Open Lab** | openlab.ece.illinois.edu

LEARN MORE entrepreneurship.illinois.edu

- ▶ **Origin Ventures Academy for Entrepreneurial Leadership** | business.illinois.edu/ael
- ▶ **Entrepreneurship Forum** | go.illinois.edu/eforum
- ▶ **IllinoisVENTURES** | illinoisventures.com
- ▶ **Innovation LLC (TEC)** | go.illinois.edu/innovationLLC
- ▶ **iVenture Accelerator** | iventure.illinois.edu
- ▶ **Office of Technology Management** | otm.illinois.edu
- ▶ **Research Park** | researchpark.illinois.edu
- ▶ **Technology Entrepreneur Center (TEC)** | tec.illinois.edu

These resources are managed by University of Illinois staff and are intended to primarily serve students, faculty, and staff of the Urbana-Champaign campus.

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Appendix B: Selected Press Featuring Illinois Startups and Recognition for Venture Creation

- Illinois ranked #4 among Public U.S. Universities for graduating the most funded founders (startups that raised \$1 million or more after May 2018) (Crunchbase, May 24, 2019).
- Poets & Quants for Undergrads (5/9/18): “Illinois Gets \$5 Million for Entrepreneurship”.
- Illinois startup, Reconstruct (AI & Digital Twin Software Company for Construction and Real Estate) raises \$7.7 million Series A investment (BusinessWire, May 14, 2019).
- Illinois startup Reconstruct among the “50 Hot Tech Companies Globally in 2019” (Crunchbase, June 20, 2019).
- Illinois startup Trala (Sam Walder, Founder/CEO; iVenture Accelerator and TechStars Chicago) raised \$1.29M in seed funding: Trala raises \$1.29 million in seed funding.
- Danny Gardner, Mesh++ Founder and CEO, named in Crain’s Chicago Business 20 in their 20s 2019 List.
- Illinois startup Octane accepted into Techstars: Announcing the 2019 Techstars Detroit Class.
- Research Park startup Agrible acquired by Nutrien for \$63M (Chris Harbourt, Founder/Alumnus).
- Four student entrepreneurs from iVenture Accelerator named to Chicago Inno’s 25 Under 25 in 2018 (25 Rising Entrepreneurs and Technologists Under the Age of 25): Ashley Moy - Cast21, Rohit Kalyanpur - Optivolt, Sam Walder - Trala, and Mary Hadley – MakerGirl.
- Rohit Kalyanpur and Paul Couston (Optivolt Labs) were youngest founders to date accepted into the Techstars Chicago Accelerator: From Full-time Students to Full-time Entrepreneurs.
- Alumni entrepreneurs Brett Jones, Kevin Karsch, and Raj Sodhi (winners of Cozad New Venture Competition and Illinois Innovation Prize) raised \$7.8M to date for their company Lightform: Lightform Raises \$5M to Turn Old Projectors into Augmented Reality Machines.
- Ashley Moy (iVenture Accelerator; winner of Cozad New Venture Competition) raised \$800K for Cast21 and wins Product Design of the Year Award at mHUB and DMDII 2nd Annual Fourth Revolution Awards.
- Crain’s Chicago Business (May 2018): “20 in their 20s: Lucas Frye” (Amber Agriculture).
- Forbes (10/13/18): “How classmates built an education nonprofit from their college campus” (MakerGirl).
- Rohit Kalyanpur (Optivolt Labs) awarded \$100,000 Thiel Fellowship from Thiel Foundation: Thiel Foundation Announces 2019 Thiel Fellows.
- Joey Varikooty (Amber Agriculture) awarded \$100,000 Thiel Fellowship from Thiel Foundation: Thiel Foundation Announces 2018 Thiel Fellows.