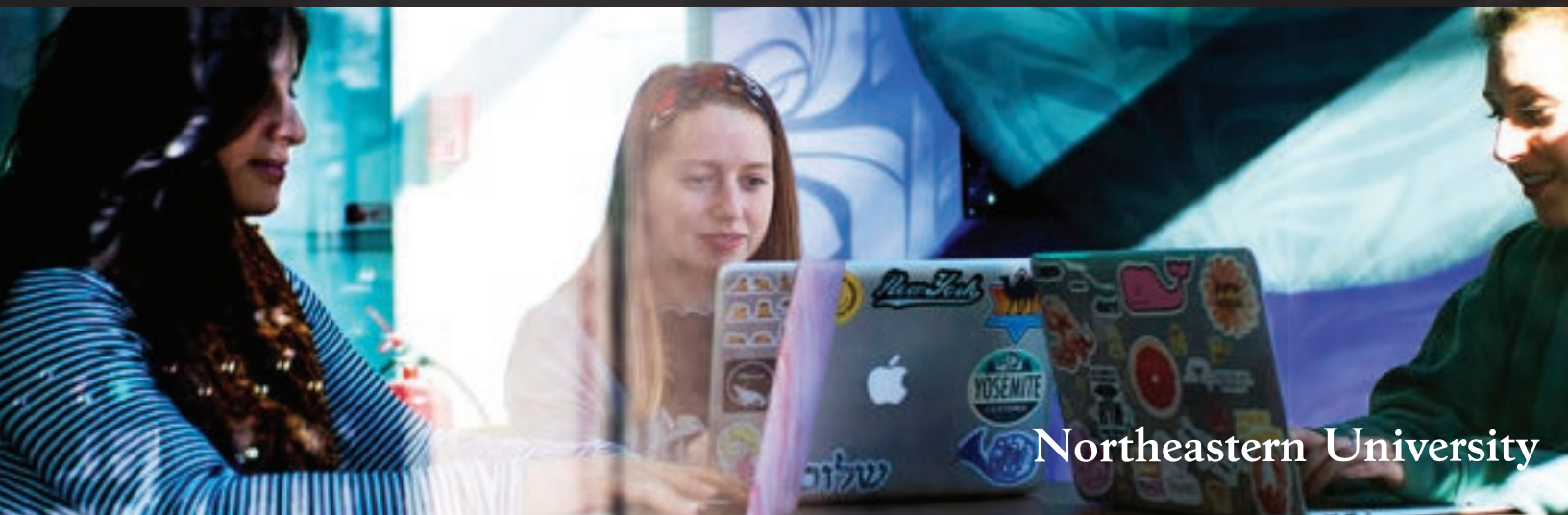
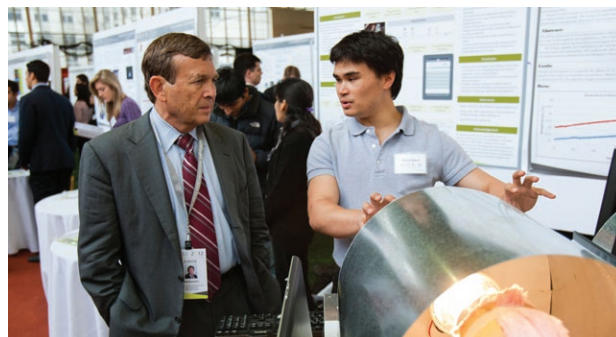


# SUPPORTING THE ENTREPRENEURIAL ECOSYSTEM AT NORTHEASTERN UNIVERSITY





## A HOTBED OF CREATIVITY AND ENTREPRENEURSHIP



**There is a perpetual buzz on Northeastern University’s campuses as our students, faculty, and researchers work on developing cutting-edge products, programs, and concepts. It’s no wonder all this innovation happens here, for our trademark co-op model appeals to exactly the kind of curious, driven minds who power this work.**

Students come to Northeastern because of co-op, in which they not only learn valuable life skills, but gain real-world work experience—and secure a professional edge over their counterparts. With the rapidly changing job market relying more heavily on artificial intelligence (AI), robots, and “smart” machines, today’s generation of students must hone the skills and traits that will position them to harness novel ideas, and to succeed and lead.

This is a critical time in Northeastern’s history, and in society’s. Now more than ever, with the arrival of AI, the world needs a robust network of innovators and entrepreneurs driven to work with anyone, anywhere, at any time. Expanding the university’s distinctive network will not only attract, excite, and engage students, faculty, and other innovators, but have a profound effect on their paths through Northeastern’s entrepreneurial ecosystem.

To achieve this aim, the university invites collaboration from visionary philanthropic partners who recognize the tangible impact they can make today and in the future. Together, we will equip our determined, inspired innovators with the tools they need to be culturally agile, collaborate free of silos, and lead discovery well into the future.

**MORE THAN**

**30**

of our faculty across the university include some form of *entrepreneurship* in their curriculum

**APPROXIMATELY**

**2,000**

students are taking one of

**35**

*entrepreneurship-focused courses*

# OPPORTUNITIES FOR PHILANTHROPIC SUPPORT



**We present the following opportunities for support in Northeastern’s entrepreneurial ecosystem, which will truly elevate the university’s offerings and increase the diversity, quality, and quantity of ventures launched.**

## **MOSAIC**

A staple in Northeastern’s entrepreneurial ecosystem, Mosaic is an alliance of student-led organizations that philanthropically supports the creation of new products and programs across our schools and colleges. The roles of the organizations vary, and their areas of expertise include, but are not limited to, marketing, intellectual property, and accounting—guiding and preparing students in a plethora of ways. Each student group within Mosaic invites participants to engage in real product design and helps launch ventures within a team setting. Mosaic’s three grant opportunities include:

- Venture incubation grants, awarded to member organizations providing services to early-stage ventures
- Collaboration grants, awarded to member organizations that have created multidisciplinary alliances with the entrepreneurship community, improving the quality and impact of ventures
- Seed grants, awarded to students with the intent to create and launch a Mosaic member organization

## **LEARNING TO LAUNCH**

With a robust curriculum in entrepreneurship in all disciplines—from business to the arts—Northeastern students can immerse themselves in a wide array of offerings through the many colleges housed within the university. Our colleges give business and non-business students the opportunity to take on entrepreneurship-focused classes through programs like Entrepreneurship with Design Thinking; pursue degrees in cultural entrepreneurship; and focus on areas such as technology ventures, family business, and social enterprise around the world.

The university’s ambitious academic plan, Northeastern 2025, seeks to elevate this coursework and our emphasis on lifelong learning into a global network of experiences, creating a diverse, inclusive ecosystem of entrepreneurial learners. The variety of roles available to our students is impressive, ranging from software to biotechnology, from web-service startups to health-focused food and drink companies, from medical devices to the next hot life-hacking apps. Most nascent ventures are led by undergraduates or recent alumni—individuals steeped in Northeastern’s entrepreneurial ethos.

# OPPORTUNITIES FOR PHILANTHROPIC SUPPORT

## IDEA

Founded in 2009, the student-led venture accelerator IDEA supports undergraduate, graduate, alumni, and faculty ventures with coaching, mentoring, and early-stage gap funding.

Gap funding is a core component of IDEA, and \$10,000 grants are available to high-potential ventures. Following a rigorous review of venture plans, milestones, and capital needs by IDEA’s investment committee, gap funds are awarded to finance a wide variety of initiatives—including developing prototypes performing market research, gaining customer validation, and designing and creating websites.

Each month, several new spin-out companies emerge with gap funding or funding from angel and venture capital sources. These startups often continue a cycle of entrepreneurship as they hire co-ops and students who graduate from the university—expanding the reach of the Northeastern entrepreneurial ecosystem.

IDEA utilizes a ready-set-go model, which 2017–2018 Altschuler-Meyer CEO Kate Murdock, DMSB’18, took one step further. During her tenure with IDEA, Murdock added an “invest” step to help prepare ventures to raise capital through mentorship and education. This addendum to the existing process increases the likelihood of ventures entering the self-sustaining launch phase, in which they join another accelerator or raise more than \$200,000 in external funding.

**IDEA HAS LAUNCHED MORE THAN**

**65** ventures, and currently has more than  
**360** active ventures preparing for launch

**TWO-THIRDS**

of IDEA’s ventures are co-founded by non-DMSB students or alumni

**17%**  
of IDEA’s ventures have a co-founder from a university other than Northeastern, demonstrating our community’s collaborative spirit

Since its inception in 2009, IDEA has helped raise more than

**\$183 million**  
in external funding for young entrepreneurs



# OPPORTUNITIES FOR PHILANTHROPIC SUPPORT

## WOMEN'S ENTREPRENEURSHIP INITIATIVE

Knowing that women are natural innovators, but often hindered by gender biases in the entrepreneurship space, Northeastern launched the Women's Entrepreneurship Initiative in 2018.

The university's signature co-op model has played a significant role in making the initiative one of the few exemplary women's entrepreneurship platforms found in institutions around the world. Northeastern's experiential model allows female students, alumni, and faculty to bring their business ideas to fruition and immerse themselves in the heady, exciting world of entrepreneurship.

This platform is crucial to the progression of Northeastern's entrepreneurial ecosystem, providing personalized coaching, mentorship, scholarship, and resources to the next generation of women eager to launch their own ventures and bring their products, services, and expertise to the world at large.

## NORTHEASTERN UNIVERSITY CENTER FOR ENTREPRENEURSHIP EDUCATION

Through the vision, leadership, and generosity of Alan S. McKim, DMSB'88, the Northeastern University Center for Entrepreneurship Education has gone from an idea to a pillar of our entrepreneurial ecosystem, marking Northeastern as one of the nation's most entrepreneurial universities.

The center brings students, faculty, and alumni together from across disciplines to develop products and services, start new companies, and become leaders in the age of robot-proof innovation and entrepreneurship.

In the spirit of Northeastern, this experiential approach allows our entrepreneurs to learn by doing at each stage of the process, with the help of essential tools and resources, as well as mentorship from world-class educators and advisors who have experience building successful enterprises.

## THE SOCIETAL IMPACT OF GUARDION

Ask any academic researcher about their long-term goals and, among them, you'll likely hear some variation of the phrase "societal impact." That's precisely the motivation behind Guardion, a venture developed by two Northeastern faculty members: Swastik Kar, professor of physics, and Yung Joon Jung, professor of mechanical and industrial engineering.



Swastik Kar and Yung Joon Jung

Guardion is a radiation sensor exponentially more sensitive than currently available options, and it's smaller and less expensive to build. Jung and Kar's vision is to deploy a network of these sensors in cities where they act as guards, sensing radiation-generated ions—hence the name Guardion.

# OPPORTUNITIES FOR PHILANTHROPIC SUPPORT

## DEEP TECH EMERGES

It has become increasingly important for our students and faculty to hone their technological skills to create a career trajectory that is not only sustainable in the age of AI, robots, and smart machines, but is one that they thoroughly enjoy. The field of deep tech, where engineering meets scientific discoveries, is booming at Northeastern.

The university supports this growing discipline through:

- Student-led organizations. Students run Origin, the university's deep-tech hub, and ViTAL, which focuses on healthcare entrepreneurship. Through these organizations, students work to understand, focus on, and thrive in a multitude of specialties.
- Outside organizations. By collaborating with agencies like the National Science Foundation (NSF) and its initiatives like NSF I-Corps, students and faculty develop and nurture their scientific discoveries, creating new technologies, products, processes, and concepts that benefit the world around them.

## MENTOR NETWORKS

Northeastern strives to make each of our networks integrative and interactive, fostering dynamic connections between students, alumni, researchers, employers, and entrepreneurs. Currently, there are three major mentor networks working to support the needs of Northeastern's entrepreneurs, as well as solve society's pressing issues.

## MORE THAN 50 VENTURES

have made it to the launch phase with IDEA's exceptional support system, including the Commonwealth Coffee Company, the Handle Bar, and Fresh Truck, a mobile grocery store that provides low-income Boston communities with access to healthy food.



IDEA ventures are supported by approximately

**30** MBA and alumni process-specific coaches,

and more than

**200** seasoned mentors across multiple industries

In addition, within the Center for Entrepreneurship Education, there are *three* Professors of the Practice, each with their own fields of specialization (software, life sciences, and consumer products and services) ready to share their expertise and encourage student ventures to flourish.



# OPPORTUNITIES FOR PHILANTHROPIC SUPPORT

## MENTOR NETWORKS: HEALTH SCIENCES ENTREPRENEURS

Residing in Bouvé College, Health Sciences Entrepreneurs (HSE) plays a critical role in the university's mission to launch ventures addressing crucial business problems in health fields. Through the exceptional leadership of HSE's founder, Joseph Fleming, PAH'70, MS'71, and HSE board member Chris Ford, DMSB'73, a vibrant community of health science entrepreneurship mentors has come to be. Further, Northeastern student, faculty, and alumni health startups have been educated and equipped with specialized education, and several innovative, dynamic projects have taken shape.



Chris Ford (left); Joseph Fleming (right)

Since its inception, HSE has mentored more than **50** NEW COMPANIES, raised more than **\$7 million** in venture funding, and educated more than **3,000** students and alumni in health sciences entrepreneurship

## MENTOR NETWORKS: MCCARTHY(S) VENTURE MENTORING NETWORK

Daniel McCarthy, who retired as the Alan S. McKim and Richard A. D'Amore Distinguished Professor of Global Management and Innovation, and venture capitalist Jeff McCarthy, DMSB'77, founded the McCarthy(s) Venture Mentoring Network (VMN). Established through the pair's \$1 million investment, VMN pairs student entrepreneurs with alumni and other industry professionals who volunteer their time and expertise to help dozens of Northeastern ventures grow and succeed.

Today the McCarthy(s) VMN network features more than **400** mentors supporting more than **100** ventures.



Front: Daniel McCarthy (left); Jeff McCarthy (right)



# OPPORTUNITIES FOR PHILANTHROPIC SUPPORT

## MENTOR NETWORKS: RESOURCES FOR ENGINEERING VENTURES

Housed within the Michael J. and Ann Sherman Center for Engineering Entrepreneurship Education and the College of Engineering is the Resources for Engineering Ventures (REV) mentor network. By connecting entrepreneurial-minded engineering students to successful engineering alumni, the network's mission is to guide these students through the university's entrepreneurial ecosystem to venture creation.

Past REV ventures include:

- Therapeutic Innovations, an organization dedicated to redesigning medical devices for developing countries without compromising quality, co-founded by Solomon Mensah, PhD'18.
- IC Health, founded by Nader Yacaman Juha, E'18, which supplies glucose monitoring devices to diabetics in low-income communities.



Solomon Mensah



Nader Yacaman Juha

## ENTREPRENEURSHIP CO-OPS

With a tremendous breadth of opportunities for students to develop their skills and knowledge, entrepreneurship co-ops help them become industry-savvy at a young age. The one-of-a-kind opportunities span many industries, and allow innovators to not only get a chance to start their own ventures, but also to join startups that need their skills.

Northeastern's relationships with **exciting startups** and **growth ventures** cumulatively offer more than

**250** six-month co-op positions **across the U.S.** and in several countries **abroad**



# OPPORTUNITIES FOR PHILANTHROPIC SUPPORT

## SUCCESSFUL STUDENT VENTURES

The Northeastern University Center for Entrepreneurship Education’s mission is to empower students, faculty, and alumni to invent products, start new companies, and become leaders in the innovation economy. Created with the vision and financial support of entrepreneur Alan McKim, DMSB’88, the university-wide center coordinates the functions of Mosaic, IDEA, mentor networks, and entrepreneurship co-ops—areas of the entrepreneurial ecosystem in need of philanthropic backing.

Entrepreneurship education is an ongoing process, and with philanthropic support, the innovative mindset that Northeastern instills in our students, staff, faculty, and alumni—a mindset that focuses on their own learning choices and knowledge—thrives. Every year, many students launch their ventures into successful entrepreneurial operations, such as these.



### SUCCESSFUL STUDENT VENTURES: KNIGHTLY

Abbey Titcomb, E’18, had a brilliant idea to help increase safety on campus. With the help of Mosaic-funded organizations, like IP Co-Lab and IDEA, along with the REV mentorship program, she launched Knightly, a mobile phone safety app and network geared toward college students.



### SUCCESSFUL STUDENT VENTURES: SCHOLARJET

Northeastern played an important role in helping Tuan Ho, E’18, Joseph Alim, E’17, MS’17, and Francisco Calderon, CIS’18, get ScholarJet off the ground. The web platform helps companies connect with students by creating action-based scholarship competitions. This means that instead of writing a typical essay, students show skills that are important to employers, like coding, 3D modeling, sales, graphic design, and video creation—expertly geared toward the future generation.

ScholarJet was supported by the Sherman Center, which offered the space, resources, and alumni mentors necessary to take the concept to the next level. “The Sherman Center co-op has undoubtedly been one of the best things that has ever happened to me and ScholarJet,” Ho said. “It gave me a chance to fully experience what it feels like to be a full-time entrepreneur.”

IDEA played a major role in ScholarJet’s initial success by awarding Ho, Alim, and Calderon \$10,000 in gap funding. IDEA also connected them to mentors like Ben Bungert, DMSB’16, program manager at the LearnLaunch Accelerator, and Irene Hammer-McLaughlin, MA’94, senior director of development for the Massachusetts Eye and Ear Infirmary, both outstanding examples in the entrepreneurship world.

# OPPORTUNITIES FOR PHILANTHROPIC SUPPORT



## SUCCESSFUL STUDENT VENTURES: UNSIZE

When Katie Wilhoit, SSH'18, was a member of IDEA, she ran focus groups to refine the concept of her venture while on co-op at the Sherman Center. Wilhoit is the founder of Unsize, a business that makes sizing in online shopping more accurate—a potential boon to retailers who spend millions yearly to process returns. She is just one example of how transformative entrepreneurship co-ops can be, especially when paired with another pillar of Northeastern's entrepreneurial ecosystem, such as IDEA.



## STUDENT-LED: THE FOUNDATION OF NORTHEASTERN'S ENTREPRENEURIAL ECOSYSTEM

Student-led initiatives are at the heart of Northeastern's entrepreneurial ecosystem. Raj Echambadi, the Dunton Family Dean of DMSB, describes this ethos as “an organic, bottom-up movement, started by, and for, students.” Here are just a few of the student-run organizations that truly shape Northeastern's unique entrepreneurial environment:



## STUDENT LED: ASCEND

A consulting group for Northeastern's students, faculty, and alumni when they are developing and growing their businesses, Ascend creates workshops and content focused on marketing strategies and topics.



## STUDENT LED: COMPASS

Founded in 2015 on the premise of “student run, experience driven,” Compass comprises accounting and finance honors students who aim to support their entrepreneurial peers in fields such as tax support, financial planning and analysis, budgeting, forecast analysis, Excel financial modeling, and accounting services.



## STUDENT LED: ENABLING ENGINEERING

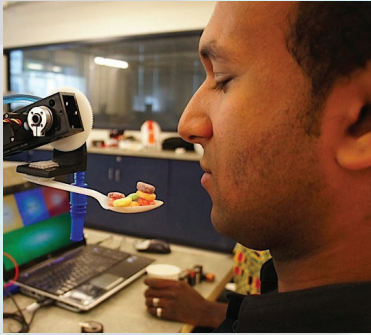
From Boston to Ecuador, Enabling Engineering's members create revolutionary devices that empower individuals with physical and cognitive disabilities, as well as the caregivers who assist them. Through this organization, Northeastern's next generation of engineers and clinicians not only invents life-changing products, but becomes more knowledgeable about, and aware of, essentials for individuals with disabilities. This combination of helping people in need worldwide, while providing students with educational opportunities, is a remarkable example of the Northeastern way.



# OPPORTUNITIES FOR PHILANTHROPIC SUPPORT

## STUDENT PROJECTS TRANSFORM INTO LIFE-CHANGING DEVICES

A standout Enabling Engineering project is the development of iCraft, a robotic arm. iCraft allowed a double amputee to regain the independence to feed himself without the help of caregivers following an accident that left him unable to use his arms. Other noteworthy projects include a tricycle where the rider pedals by pushing the handlebar, and an adaptive guitar that presses cords automatically while the musician strums along.



MORE THAN

**500**

students have participated in Enabling Engineering since its inception

In 2017, more than **100 students** worked on **23 design projects** that increased independence, reduced medical burdens, and fostered social connectedness for their users



## STUDENT LED: ENTREPRENEURS CLUB

Serving Northeastern students looking to harness their entrepreneurial drive, the Entrepreneurs Club hosts activities and events to propel students' interests in the field. These activities include a speaker series, a business planning competition, hackathons, and tours to technology companies in the Boston area. The club provides a platform for students to build meaningful relationships and have entrepreneurial experiences outside the classroom.

**The Entrepreneurs Club** is the **largest** student organization on campus, engaging more than **1,000 students annually**

# OPPORTUNITIES FOR PHILANTHROPIC SUPPORT



## STUDENT LED: GENERATE

Members of Generate support the product development needs of their entrepreneurial peers, all while gaining hands-on experience and exposure to multiple levels of engineering. Professor Andrew Gouldstone, director of the Sherman Center and Generate's co-faculty advisor, describes Generate as an "integral part of what defines the Sherman Center, and by extension what defines the university's entrepreneurial ecosystem."



## STUDENT LED: IDEA

Northeastern's venture accelerator IDEA provides entrepreneurs with the support, resources, and educational experience necessary for developing a business from core concept to launch. The sheer amount of activity transpiring from IDEA is substantial and growing. The high volume of ventures working through the system allows young entrepreneurs to learn the rigors of building and leading companies.



## STUDENT LED: IP CO-LAB

Led by students at the School of Law and faculty from the School of Law and DMSB, IP Co-Lab provides a range of crucial intellectual property-related legal information and services to inventors and their ventures. By collaborating with the university's Center for Research Innovation, IDEA, and the Center for Entrepreneurial Education, IP Co-Lab strives to enhance Northeastern's innovation environment and provide opportunities for all community members to better understand and use intellectual property.

"We pride ourselves in creating and training **'Chief Entrepreneurial Officers'** who think differently and are capable of solving the grand challenges of business and society in a global economy."

—**RAJ ECHAMBADI**, THE DUNTON FAMILY DEAN OF THE D'AMORE-MCKIM SCHOOL OF BUSINESS AT NORTHEASTERN UNIVERSITY



# OPPORTUNITIES FOR PHILANTHROPIC SUPPORT

## STUDENT LED: NUIMPACT



Since its inception in 2016, the female-founded organization, NUImpact has served as a unique resource and thought-exchange for the Northeastern community to understand purposeful capital, develop technical skills, and gain exposure to professional opportunities in the field of impact investing.

The NUImpact Fund provides hands-on finance and social impact education through a rigorous semester-long four-step investment process undertaken by teams of student analysts. Students build technical skills through workshops and real-world assignments, developed with the counsel of faculty and alumni advisors alongside investment industry partners.

## STUDENT LED: ORIGIN



Bringing together ambitious minds to foster innovative solutions, Origin is an interdisciplinary organization that supports ventures focused on scientific discoveries, engineering, mathematics, physics, and medicine that fulfill societal needs. Through these partnerships and processes, Origin ventures explore the world of entrepreneurship and make ambitious STEM visions a reality.

## STUDENT LED: SCOUT



The university's strong entrepreneurial spirit is what fuels Scout day in and day out. This design studio is solving problems and drawing people from different disciplines together through real client work, speaker series, and interactive workshops—and bridging the gap between Northeastern's creators and thinkers.



# OPPORTUNITIES FOR PHILANTHROPIC SUPPORT



## STUDENT LED: SOCIAL ENTERPRISE INSTITUTE STUDENT ASSOCIATION

Housed in DMSB, the Social Enterprise Institute Student Association partners with Northeastern's Social Enterprise Institute to alleviate poverty in the developing world. Rooted in sustainable, enterprise-based solutions, the association educates, builds, and nurtures the next generation of social entrepreneurs and global business leaders through programs, educational activities, projects, and startups.



## VITAL

Hosted by the Bouvé College of Health Sciences, ViTAL focuses on healthcare entrepreneurship by empowering students with learnings beyond the classroom to foster an interdisciplinary perspective on healthcare. Through workshops and a vast mentor network, ViTAL looks to build a community challenged to disrupt healthcare with an entrepreneurial mindset.



## WOMEN'S INTERDISCIPLINARY SOCIETY OF ENTREPRENEURSHIP

In an effort to promote a more diverse entrepreneurial ecosystem at Northeastern, two Northeastern students launched the Women's Interdisciplinary Society of Entrepreneurship (WISE) in 2018. The organization is dedicated to helping cultivate an entrepreneurial mindset and supporting all women interested in launching their own ventures through educational workshops, startup classes, and mentorships. WISE also hosts an annual summit, where participants can share ideas and experiences while developing valuable networking relationships. By opening the doors to individuals in all fields and industries, the women of WISE work to inspire and encourage others to explore entrepreneurial curiosities, take innovative approaches, and realize their ambitions.

Northeastern is becoming increasingly more recognizable as a frontrunner in empowering emerging leaders to invent, launch companies, and become trailblazers in the innovation economy.



# A LOOK AT NORTHEASTERN'S DISTINGUISHING MOMENTS

## ACKNOWLEDGMENTS, AWARDS, AND ACCOLADES

Northeastern has received a number of external honors for our remarkable level of entrepreneurial activity, including:

### #5 RANKING

in 2019 by *Entrepreneur Magazine* and the Princeton Review among national universities for undergraduate entrepreneurship programs

### THE 2018 ENTREPRENEURIAL UNIVERSITY AWARD,

as recognized by the Deshpande Symposium for Innovation and Entrepreneurship in Higher Education. This award is given to an institution that demonstrates overall excellence in innovation and entrepreneurship

An **A+**

for Northeastern's intellectual property program in the spring 2018 issue of *preLaw* magazine, largely due to our student-led IP Co-Lab

## THE BRIGHT FUTURE

In collaboration with our philanthropic partners, Northeastern's entrepreneurial ecosystem will continue laying the groundwork for the next generation of innovators, at all levels and from all disciplines. This is true whether they are pursuing corporate innovation careers or working in research centers, launching startups, or engaging with social enterprises.

By investing in these entrepreneurial-minded students, alumni, and faculty—and the ventures that come with them—we are helping to fuel state-of-the-art programs, products, and concepts that will enhance today's society and shape our world for generations to come.

For more information:

Visit our website [advancement.northeastern.edu](http://advancement.northeastern.edu)  
or call 617.373.2520