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## GLOBAL INNOVATION EXCHANGE

*Developing leaders in Innovation*

### **We collaborate across borders and boundaries to innovate on local and global challenges**

**The Global Innovation Exchange (GIX) is a new model of experiential education and practice to develop leaders in innovation. Starting with its project-based, team-based graduate degree programs, GIX will grow to include a broad array of innovation experiences for students, executives, and working professionals. With founding partners the University of Washington, Tsinghua University, and Microsoft, GIX is a global collaboration between leading university and cross-sector partners.**

### **Collaboration Across Boundaries**

To find solutions to global challenges, we must cooperate across traditional boundaries. GIX brings top faculty and learners from across disciplines and around the world to work in close collaboration with industry partners and leading entrepreneurs from diverse industries. Through project-based learning, students, researchers, and industry professionals create solutions to pressing global challenges such as health, sustainability, and social equity.

Our goal is to have GIX be top of mind for innovators, learners, and dreamers looking for a place to bring their drive, creativity, and desire to make an impact on the world.

The result will be an influx of talent, expansion, and re-location of innovation businesses to this region, and the “digital transformation” of legacy companies from brick-and-mortar platforms to virtual ones.

Here’s how we will accomplish this:

- Recruiting a diverse mix of learners from the U.S., China, and all over the world. We attract the best and brightest innovators globally.
- Attracting students who are doers, makers, and future thinkers who want to make the world a better place with their innovations.
- Drawing in students with big ideas to either further develop and bring to the market or potentially build within an existing company.

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*We cannot solve our problems with the same thinking that we used when we created them.*

Albert Einstein







### GIX Vision

Discussions between Microsoft and UW led to the vision that took form as the Global Innovation Exchange (GIX) starting with a master’s degree program developed by the University of Washington and Tsinghua University, China’s leading technology and innovation university.

GIX attracts innovators from all over the world to our region to help meet the needs of the global technology marketplace. The first cohort of students enrolled at Tsinghua in the fall of 2016. In the fall of 2017, students began classes at a new, custom-built facility located in the Spring District of Bellevue, Washington.

Microsoft has been a key partner in the launch of this program, making an initial investment of \$40 million, and the Bill & Melinda Gates Foundation contributing an additional \$10 million. GIX includes an academic network of prestigious universities from around the world, a consortium membership program comprised of industry partners, and a robust mentor network of seasoned entrepreneurs and experts.

### How GIX is Different

GIX’s interdisciplinary curriculum and project-based coursework teaches students to take an innovation from concept to development and on to launch. The interplay between design thinking, technology development, and entrepreneurship prepares students to contribute solutions to a range of global challenges and business needs. Industry and nonprofit partners help identify global challenges and provide ongoing mentoring and support to a global student cohort, driving solutions from idea to impact.

Design thinking courses will teach students how to define a clear user need and take a user-centered approach to the design process. Technology courses cover topics such as managing data, signal processing, and hardware prototyping. Entrepreneurship courses focus on startup basics, team building, marketing, and intellectual property law.

*“21st century innovation that truly meets human needs requires skills such as teamwork, creativity, and cultural awareness. We envision GIX as a place where all of this can be brought together to foster the kind of innovation and progress that will both grow the innovation economy in the Puget Sound region while truly benefiting humankind.”*



**Vikram Jandhyala**  
Co-Executive Director,  
Global Innovation Exchange (GIX)  
Vice President for Innovation Strategy,  
University of Washington



### GIX Focus

The initial focus of GIX is on connected devices in fields like sustainability, IoT, health, social equity, and more. Potential future phases could also include:

- Healthcare innovation (mobile health, and social determinants of health)
- Clean energy (renewables, smart buildings)
- Sustainable cities (environmental, economic, and social equity)

### Degrees Offered

GIX offers a 15-month Master of Science in Technology Innovation (MSTI) degree from the University of Washington. Students may expand their global perspective by studying for an additional six months at Tsinghua University for the dual degree which combines the MSTI with a Master of Engineering in Data Science and Information Technology from Tsinghua University. Over time, new degree options, certificate programs, and fields of study will be added.

### GIX Outcomes

Graduates will have the technical and design thinking skills and business confidence to launch their own startup, join a new venture team at a leading company or nonprofit, or advance their academic pursuits. Over time, we expect industry partners to acqui-hire GIX teams. We anticipate GIX alumni to create new startups, lead in-house innovation teams, and eventually create new markets and industries.

### GIX Innovation Competition Winners

The winners of the most recent GIX Innovation Competition demonstrate the types of projects students are working on. GIX created the annual competition to spur creative solutions to global challenges. This year’s theme was Connected Devices, with an added robotic technology track from our competition partner, Meituan-Dianping. Three of the top winners invented solutions in healthcare, fitness, and smart home technology.



**BILLY** – developed the first walking aid device to help Alzheimer’s patients recover from wandering without calling for additional support. The device auto-detects abnormal conditions on routine walks and then guides the patient back in the right direction. It also sends customized notifications to caregivers and authorities in emergency situations.

**Airy** – created batteryless door and window sensors for home security application. Its compact sensor features a micro-generator that harvests energy from the mechanical impact in the operation of a door or window to power a wireless transmitter (Z-wave). Airy is both a convenient and environmentally friendly alternative to battery-run, smart home sensors.

**Inspireus** – presented the first wearable device that guides the breathing of users during yoga and meditation. Utilizing innovative machine learning techniques and signal filtering, the electronic device monitors respiratory rhythms, heart rate, and heart rate variability in real time. It also connects with an intuitive mobile application to create an interactive user experience.



## The Steve Ballmer Building

A new, state-of-the-art facility in the Spring District of Bellevue, Washington, supports GIX's world-class students and faculty. The building is located in a new urban development east of Seattle built around planned light rail. Just 10 miles from the UW campus, the location offers proximity to multiple technology corridors and is part of a 36-acre mixed-use development.

At the heart of the three-story building is the makerspace which facilitates the making of prototypes and new products. The building was specifically designed for the GIX program and features design studios, an incubation space, electronics prototyping labs, and spaces for collaboration and presentations.



## Meet Archisa Guharoy



*As a first-year Master's student in the GIX MSTI program, Archisa spends most of her time designing, developing, and launching ubiquitous and highly innovative technology solutions for the future. Before GIX, Archisa completed her B.E. of Electrical Engineering in Bangalore, India, where she developed a passion for deciphering the complex architecture of control systems and micro-controllers. She now joins GIX with the goal to create sustainable, cost-effective products that have widespread and meaningful social impact.*

## For more information:

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