

OREGON STATE ENGINEERING AWARDS

FEBRUARY 23, 2017



FROM THE DEAN

Creating a Better Future – Together

At Oregon State University, we are engaged in a deliberate and vigorous effort to transform our culture into one that reflects our values of inclusivity, diversity, and collaboration. The College of Engineering's strategic plan lays out specific targets for achieving this cultural shift throughout the organization.

Inclusivity goes beyond racial equity. We need to create gender equality and advocate for civil rights related to workplace practices. We need to address the various access challenges faced by people with disabilities. We need to celebrate ethnic diversity throughout our society, recognizing that diversity is the path to excellence. In this era of global connectivity, we must address the challenges associated with cross-cultural communication and collaboration. And this is by no means a comprehensive list.

We are keenly aware of how traditional institutional systems, practices, and ways of thinking have created barriers and caused imbalances in many areas related to inclusion and collaboration. It's important to understand that creating a truly inclusive and collaborative community goes far beyond adapting our hiring and admission practices. It encompasses the ways we talk with each other, how we choose our research projects and design them, how we prioritize our time and energy, and much more.

We are taking a three-dimensional approach to transforming our culture: 1) attaining diversity among the people we recruit and hire, 2) revamping our systems and processes to eliminate barriers to inclusivity and a collaborative mindset, and 3) contributing to the evolution of knowledge through relevant research and policymaking.

At our upcoming Oregon Stater Awards celebration, we will honor an impressive cohort of 12 alumni who embody many of our values as a college. For example, John Blankenbaker, our Hall of Fame honoree, created the first personal computer – an affordable machine that would alleviate the cost barrier for would-be programmers – and invented computerized solutions for people with visual disabilities. His work reflects our values of inclusiveness, innovation, and entrepreneurial spirit.

We also will honor Patricia Walsh, an early career engineer who was perhaps a direct



beneficiary of Blankenbaker's early work. She didn't let her blindness get in the way of obtaining a degree in electrical engineering and computer science, establishing a successful career in the field, and simultaneously breaking world records as an athlete.

We will honor 10 others with equally impressive résumés – Oregon State graduates who have gone on to make major impacts in their respective fields, such as nuclear safety, precision healthcare delivery, construction engineering management, climate change science, and so forth.

When engineers work collaboratively and

inclusively, we change the world. When our alumni come back and help us bring up the next generation of engineers, everyone benefits. We invite you to join us in saying “thank you” to these brave and committed individuals who are helping us create a better future – together.

Go Beavs!

Scott A. Ashford, Ph.D.

'83 Oregon State, Civil Engineering
Kearney Professor and Dean
College of Engineering
Oregon State University

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Illustration by Santiago Uceda



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Welcome to the Oregon Stater Awards

Oregonian Media Group is proud to publish this special program commemorating the 2017 Oregon Stater Engineering Awards for the fourth year running. The work accomplished by OSU's distinguished alumni drives progress and innovation throughout all fields of industry and science — from major advancements in healthcare and computer technologies, to digital and print publishing, to name just a few.

As Oregon's largest media outlet we're privileged to report on OSU's accomplishments across all academic fields of study. Engineering is a field that captures the imagination — serving society by transforming the most challenging problems of business and science into solutions, and transforming humankind's most imaginative dreams into realities.

Congratulations to all of this year's honorees.

John Maher

President, Oregonian Media Group



THE BRINK OF DISCOVERY CAN BE EVERYWHERE.

And that's where we go. From mountain peaks to ocean depths to the very edge of what's known, Oregon State University is working to find solutions to world's toughest problems.

We're up for the challenge and in it for a better world.

oregonstate.edu



Oregon State
UNIVERSITY

COLLEGE OF ENGINEERING

AT A GLANCE



The College of Engineering at Oregon State University delivers impactful learning experiences that inspire solutions to complex global problems.

We leverage mutually beneficial partnerships with industry, academic institutions, government, and other entities to foster collaboration; encourage synergies in teaching, research, and innovation; and strengthen Oregon's future by commercializing faculty and student inventions.

Founded in 1889, the College of Engineering has awarded more than 35,000 degrees, resulting in sustained contributions to society and science. For example, achievements include inventing the first artificial heart valve, the computer mouse, and the concept of email.

VISION

To create a better future.

MISSION

The College of Engineering transforms lives and enhances society through impactful education and research. In an inclusive and open environment, we produce:

- >> Graduates who are highly valued and in demand.
- >> Solutions to global challenges.
- >> Partnerships that ensure responsiveness to Oregon and beyond.

ENGINEERING DEGREES

ONLINE

B.S. in Computer Science
(post-bacc.)

M.Eng. in Industrial
Engineering

M.S./M.H.P. in Radiation
Health Physics



Michelle Cramer
M.Eng. in Industrial Engineering
Engineer, Boeing



While working as a Boeing engineer in Portland, **Michelle Cramer** decided to boost her career prospects with a master's degree. So she turned to Oregon State University Ecampus.

OSU's College of Engineering offers programs online so working professionals like Michelle can advance their careers on their own time.

ecampus.oregonstate.edu/engineering

Oregon State
UNIVERSITY



BY THE NUMBERS

STUDENTS

(as of fall term, 2016)

Total: 8,724

Females: 1,731

Males: 6,993

International: 1,715

Minority: 1,988

Undergraduate students: 7,366

Average incoming GPA: 3.61

Average incoming SAT: 1188

Honors College students: 478

Graduate students: 1,358

Average incoming GRE: 314

Ecological Engineering

Electrical and Computer Engineering

Environmental Engineering

Industrial Engineering

Manufacturing Engineering

Mechanical Engineering

Nuclear Engineering

Radiation Health Physics

Undergraduate Minors

Humanitarian Engineering

Aerospace Engineering

OSU Cascades Undergraduate Majors

Computer Science

Energy Systems Engineering

Graduate Majors

Bioengineering

Biological and Ecological Engineering

Chemical Engineering

Civil Engineering

Computer Science

Electrical and Computer Engineering

Environmental Engineering

Industrial Engineering

Materials Science

Mechanical Engineering

Medical Physics

Nuclear Engineering

Radiation Health Physics

Robotics

FACULTY

Tenured/tenure-track: 182

Instructors: 36

Research personnel: 34

Staff: 114

Endowed positions and professorships (>\$250K): 22

FUNDING

(as of fall term, 2016)

Operational budget: \$133.6M

Research grants: \$37.1M

Annual private giving: \$20.5M

Scholarship support: \$1.9M

DEGREE PROGRAMS

Undergraduate Majors

Bioengineering

Chemical Engineering

Civil Engineering

Computer Science

Construction Engineering Management

ABOUT THE AWARDS

IN 1998, THE COLLEGE OF ENGINEERING introduced the annual Oregon Stater awards to honor outstanding alumni and friends for their contributions to the engineering profession and to Oregon State University. Our three award categories are determined by length of career and accomplishments:

ENGINEERING HALL OF FAME

Membership in the Engineering Hall of Fame is reserved for Oregon Staters who have made sustained and meritorious engineering and/or managerial contributions throughout their careers.

ACADEMY OF DISTINGUISHED ENGINEERS

Membership in the Academy of Distinguished Engineers is awarded to mid-career Oregon Staters who have made sustained and distinguished contributions to the profession, the field, the university, or society at large. They have at least 20 years of professional experience beyond their bachelor's degree and are still practicing their profession.

COUNCIL OF OUTSTANDING EARLY CAREER ENGINEERS

Membership in the Council of Outstanding Early Career Engineers is reserved for Oregon Staters who have distinguished themselves through professional practice and/or service to the university, the profession, or society at large. These individuals have made early career contributions that identify them as future leaders in their profession or field. They have fewer than 20 years of professional experience beyond their bachelor's degree.



INSPIRED BY EXPERIENCE

OREGON STATE UNIVERSITY STUDENTS put theory into action through undergraduate research, global experiences, and internships. And OSU's College of Engineering is leading the way.

Through the Student Success Initiative, the OSU community is coming together to create more of these powerful opportunities to fully engage students—and prepare them to thrive in school and throughout their lives.

Learn more at: OSUStudentSuccess.org

HALL OF FAME



**JOHN V.
BLANKENBAKER**

B.S. Physics, 1952

B.S. Mathematics, 1952

Computer Engineer, Inventor (Retired)

Florence, Vermont

“I hoped to provide a machine that was low enough in cost, though perhaps limited in capability...”

Some computer manufacturers boast that their companies built the first personal computer, but according to the Computer History Museum and others, that honor actually belongs to John Blankenbaker.

Engineers were carrying slide rules in their pockets when Blankenbaker attended Oregon State in the late 1940s and early 1950s. “I gave a talk on computers in 1951 to the mathematics club, and I’ll bet that was the first time that there was a talk on computers on campus,” said Blankenbaker. Computers were in their infancy and cost thousands of dollars.

Blankenbaker first attempted to design a computing device in 1949, but he abandoned the work when it became obvious to him that it would be too expensive for him to build. He completed an internship at the National Bureau of Standards, where he was assigned to the Standards Eastern Automatic Computer project, and that experience increased his belief that computers were the wave of the future.

Following graduation, Blankenbaker contributed to various computer projects for Hughes Aircraft Company while earning a master’s degree in physics from the University of California–Los Angeles. His desire to create a computer that was affordable and educational for individuals was born during those years. To round out his education, he earned a professional degree in electrical engineering from the Massachusetts Institute of Technology in 1959.

After consulting for Curtis Wright, which was developing a digital training system for fleet

ballistic missiles, he moved on to Scantlin Electronics to help streamline stock market data reporting. When he resigned from Scantlin, a \$6,000 parting gift from the company gave him the seed money he needed to make his dream of building a small, affordable computer come true. By September 1971, he had sold the world’s first personal computer: the Kenbak-1.

“At that time, it was not very practical to use a computer to learn programming or to study computers, and that’s what I hoped to overcome with the Kenbak-1,” said Blankenbaker. “I hoped to provide a machine that was low enough in cost, though perhaps limited in capability, to provide education and fun for individuals.”

have all that many instructions. But it was a very good instruction set and it tried to demonstrate what you might encounter.”

He said that his intention was to “give the flavor of a computer” so people could learn how the technology worked. Only about 50 units were produced before Blankenbaker decided that the undertaking wasn’t profitable and sold the design.

Later career accomplishments included developing high-performance computers that could process up to four streams of speech for distribution over a telephone line and the production design of a Lisp processor. (Lisp was one of the earliest high-level programming languages.) After taking partial retirement in 1985, he worked part-time for



The Kenbak-1 sold for \$750 (about \$4,470 in today’s dollars). “This was a time when the minimum price for a standalone computer was about \$10,000,” said Blankenbaker. “It was not a very useful device in a business or scientific sense, because it was so small, but of course it was quite early. There were only 256 bytes of memory in the machine, and instructions were 2 bytes each, so you couldn’t

Science Products, a company that made products for the blind, and taught physics and mathematics at Lincoln University.

Since 1985, Blankenbaker also has indulged his love of history and genealogy. For 15 years, he published a research journal called *Beyond Germanna* and other related materials covering the history of German immigrants who colonized the Piedmont area of Virginia in the 1700s.

AWARD

ACADEMY OF DISTINGUISHED ENGINEERS



**ROBERT
BERGSTROM**

B.S. Mechanical Engineering, 1968
 Founder, President, and Research Director
 BAER Institute
 San Francisco, California

While studying mechanical engineering at Oregon State, Robert Bergstrom specialized in heat transfer. After graduating, he earned a master's and Ph.D. from Purdue, and applied his knowledge to the problem of climate change. "Climate change is really a heat transfer problem," he said.

Bergstrom joined NASA's Ames Research Center as a national research associate in 1974. He was called to testify as an expert witness in several court cases, and those experiences piqued his interest in the law, so he obtained a law degree from Stanford in 1983. He became a member of the California Bar and worked as an environmental attorney for about a year before signing on at the Environmental Protection Agency as assistant regional counsel for the San Francisco region. He received an EPA Gold Medal for Meritorious Service in 1991.

During that time, Bergstrom also co-founded Legisoft, which produced a best-selling software application called WillMaker (it is now an Intuit product).

Bergstrom wanted to continue his research on air pollution, so he sought funding to quantify the effects of soot on increased solar radiation in the atmosphere and its consequent contributions to climate change. He reconnected with his colleagues at Ames and by 1992 had founded the BAER Institute, a nonprofit research group, to facilitate funding for his research.

The BAER Institute has grown to provide a research home for about 100 scientists. "It gives researchers a home where they get decent benefits — a retirement plan, medical insurance, and that kind of thing — so it's actually worked out quite well," said Bergstrom.

"Climate change is really a heat transfer problem."



**SHARADA
BOSE**

B.S. Computer Science and Engineering, 1986
 M.S. Computer Science and Engineering, 1988
 Chief Operating Officer
 Way.com
 Fremont, California

Sharada Bose stepped out of Oregon State directly into HP's Corvallis division. After two years, she moved to the company's headquarters in Silicon Valley and held various leadership roles over the next 14 years before retiring in 2012.

"I thoroughly enjoyed my 24-year career at HP," said Bose. As a single mother, she liked the corporate stability HP offered, and as an engineer she enjoyed contributing to software, server, storage, cloud, and data center technologies. She created and led large, global teams and worked successfully with technology giants such as Microsoft, SAP, and Oracle.

"During those 24 years, while HP had six different CEOs, I acquired the equivalent of two additional engineering degrees and three MBA degrees," she said.

But there was always part of her that dreamed of joining a startup. "Many startup opportunities came my way in the early 2000s during the internet boom," she said. "I had several friends saying, 'You'd be a perfect fit, come join us.'"

After retiring from HP, Bose embraced the fast-paced, versatile world of startups. As chief operating officer at Way.com, she is involved in building a company from the ground up. "I'm now living my dream," she said.

As a community leader, Bose serves on several nonprofit boards. She is a trained classical Indian dance artist, and she dances, teaches, and writes about the art and culture of the dance form. She is also a trained counselor and advocate for victims of sexual assault.

"I'm now living my dream."

ACADEMY OF DISTINGUISHED ENGINEERS



**SUE
GALATZ**

B.S. Chemical Engineering, 1986
Business Director
NikeID
Portland, Oregon

Although her undergraduate degree is in chemical engineering, throughout her career Sue Galatz has used that strong foundation to build on her natural talents as a business leader.

Galatz's first job after graduating was at Tektronix, where she focused on engineering management and corporate strategy. In 1991, she moved to Mentor Graphics to drive change in the company's business model, operations, and supply chain.

Her career at Nike began in 1996. She has held several director-level positions with the company, but the accomplishment she is most proud of is helping to shape a social movement at national and international levels.

As strategic planning director at Nike, Galatz helped galvanize organizations worldwide to encourage children and adults to get moving. She led a team

that forged partnerships with the Clinton Global Initiative, Michelle Obama's "Let's Move! Active Schools" program, the United Nations Development Program, and other organizations to unleash human potential.

"It was really exciting to see how you can drive awareness to a critical global issue — physical inactivity — and work with others to make a difference," said Galatz. "Over 100 organizations around the globe were involved in it, and we continue to see impact."

In her current position, she is focused on intrapreneurial efforts involving customization.

"I love bringing new ideas to life," she said. "I'm still amazed at the breadth of what my engineering degree gave me. I've always been interested in the engineer as the 'architect' or 'conductor' that brings multiple disciplines together to drive change."

"I'm still amazed at the breadth of what my engineering degree gave me."



**GARY
HILBERG**

B.S. Chemical Engineering, 1988
President and Chief Executive Officer
Everest Sciences
Cypress, Texas

Gary Hilberg entered Oregon State as an NROTC midshipman and became a commissioned officer in the United States Navy upon graduation. He was assigned to the nuclear submarine U.S.S. La Jolla as an engineering officer.

By the time he had completed a 3-year tour of duty, Hilberg had served on two forward deployments, led five engineering divisions, completed nuclear engineer training, and qualified to work on naval reactors. He became the officer in charge of a performance monitoring team. During his second tour of duty, he earned an MBA, supported a fast-attack submarine fleet, and completed California's professional engineer certification.

In 1995, Hilberg joined NAES, an international private power generation services company, as manager of technical services. In 1997, he went to General Electric, where he

grew long-term power plant maintenance services agreements for what became a \$16 billion program. In 2000, he joined P2 Energy and developed the company's third-party gas turbine parts business into a multi-billion-dollar market.

Joining TAS Energy in 2002, he led the explosive growth of its gas turbine inlet cooling business and commercialized organic Rankine cycle technology for industrial waste heat and geothermal markets. Since 2014, he has guided Everest Sciences in improving industrial facility efficiency and performance using patented process cooling technology.

Hilberg said he continues to use the basic engineering skills he learned at Oregon State.

"Even though I'm not doing engineering myself, I oversee a lot of engineers," he said. "You need leadership that understands technology, or you can't apply it."

"You need leadership that understands technology, or you can't apply it."

AWARD

ACADEMY OF DISTINGUISHED ENGINEERS



**JEFFREY E.
PERALA**

B.S. Construction Engineering
Management, 1985

Co-owner, Perlo Construction
Portland, Oregon

As an Oregon State junior, Jeff Perala landed an internship as a field engineer with McCormack Pacific in Portland. By the time he finished the internship, he had been offered a job after graduation. He has spent his entire career at the same firm.

Today, the company is called Perlo Construction, and Perala co-owns the company alongside his Oregon State classmate, Gayland Looney ('85 Construction Engineering Management).

Soon after Perala went to work at McCormack as a project manager, he discovered that his strength was in estimating. As chief estimator for the company, he refined its methods to produce exceptionally accurate budgets. His system helped make the firm an industry leader in the Pacific Northwest. The company builds

facilities for Oregon and Washington's "meat and potatoes" industries, said Perala, and brings in more than \$250 million in revenue.

"One of our claims to fame is that we have more warehouses and distribution centers in Oregon than all competitors combined," he said.

Perala is proud of the fact that most of his company's business comes from repeat clients or direct referrals. "You couldn't do that in a competitive industry if you didn't treat everybody right and do an excellent job at communication," he said. "We want everybody on our projects to be successful."

Perala credits his Oregon State education for giving him a firm professional foundation. "The construction engineering management program is phenomenal — there's a reason it's ranked one of the highest," he said.

"We want everybody on our projects to be successful."



**ROGER P.
SHAW**

B.S. Nuclear Engineering, 1975

Chief Executive Officer

Shaw Partners, LLC

Delray Beach, Florida

Roger Shaw's career path became clear to him during his first job assignment as a radiological engineer at the Hanford Nuclear Reservation.

"That's when I got into high gear and wanted to do much, much more," he said. And he has.

During his 40-year career, Shaw's impact in the field of nuclear engineering and safety has been broad and deep. He has made significant contributions in nuclear plant operations, radiation protection, radiological engineering, radiological effluents, emergency management, occupational safety, and radiation litigation.

Some career highlights include serving as the first director of radiological controls and occupational safety at the Three Mile Island Nuclear Station, and advising Japanese engineers and government officials on radiation safety in the wake of the 2011 Fukushima Daiichi disaster. He was project manager on

the first U. S. nuclear utility radiation worker cancer mortality study, which assessed the occupational exposure of 54,000 workers at 52 nuclear power plants across the country.

As a member of the National Council on Radiation Protection Scientific Committee, he prepared reports for NASA addressing radiation dose limits for astronauts. He served as president of the Power Reactor Section of the Health Physics Society.

Shaw founded Shaw Partners in 1999. Today, he counsels attorneys and clients on issues related to the nuclear industry. He is a faculty member at Thomas Edison State University, where he developed college courses in nuclear energy technology, radiation protection, and emergency preparedness.

Shaw credits continuing education with a key to his success. "Your entire career is a series of choices," he observed.

"Your entire career is a series of choices."

COUNCIL OF OUTSTANDING EARLY CAREER ENGINEERS



**MANISH
GIRI**

M.S. Chemical
Engineering, 1998

Director, Funai
Microfluidics

Funai Corporation

Lexington,
Kentucky

“... a passion
to create, to
innovate,
was at the
heart and
soul of why
I chose
engineering.”

Manish Giri has a simple vision for healthcare. “Healthcare is considered a burden on society today,” he said. “It’s perceived as a problem, and that it’s expensive and painful to address a fundamental human need. I want to remove that stigma.”

Giri believes that patients should be empowered to take ownership of their own health, and that technology is a critical piece in making that happen. For the last 16 years, he has dedicated his efforts towards innovations in drug discovery systems, point-of-care diagnostics, and precision drug delivery.

After earning a Ph.D. from the University of Maine and establishing himself as a leader at HP, Giri led a cross-organizational team in developing an in vitro diagnostics solution for the healthcare and life sciences industry. He also established the technical and business foundation for a startup that involved developing a novel screening technology for pre-clinical drug screening.

Today, he is directing the growth strategy for the microfluidics division of Funai Electric Company, a multi-billion dollar consumer electronics company. Funai’s plan is to develop solutions in the personal, home care, commercial digital printing, healthcare, and life sciences markets.

“Imagination and a passion to create, to innovate, was at the heart and soul of why I chose engineering,” said Giri. “To me it was always all about creating — new devices, new systems, new gadgets that could solve a problem, address an issue. I constantly challenge the status quo and strive to change things a little bit — make them better, more efficient, effective and affordable.”



**KATIE ERIN
JEREMIAH**

B.S. Construction
Engineering Man-
agement, 2001

Attorney, Jordan
Ramis, P.C.

CEO and General
Counsel, Aggregate
Resources, Inc.

Lake Oswego and
Springfield, Oregon

“It’s been
really fun
to be able to
weave
together the
educational
background
of law and
engineering.”

Katie Jeremiah has taken a nontraditional path with her engineering degree and, as a result, is on Engineering News-Record’s 2013 “Top 20 Under 40” list, in addition to several similar distinctions.

Jeremiah was raised around heavy construction. Her father founded a rock drilling and blasting company nearly four decades ago, and today she leads the company’s strategic direction and makes day-to-day management decisions. She oversees operations throughout six Western states. But also, as an attorney with Jordan Ramis, Jeremiah represents mine operators and contractors in federal administrative law, contract, and land-use matters.

After graduating, Jeremiah spent almost five years at DPR Construction in San Diego, California, as a project engineer for various commercial building projects. After working on a large, complex project with DPR, she was inspired to seek a law degree.

“How the whole project came together was fascinating to me from a contract perspective,” she said. After earning a J.D. from Lewis & Clark, she went to work as a law clerk at Jordan Ramis, and today is an “of counsel” attorney with the firm.

“It’s been really fun to be able to weave together the educational background of law and engineering — being able to work with clients who don’t have to educate me on the technical aspects of their issues,” said Jeremiah. “It hasn’t been that I stopped one career and had to start completely over.”

Jeremiah is also an active volunteer with professional organizations, including serving as a governor’s appointee to the board of the Oregon Department of Geology and Mineral Industries.



**ERIENNE
KRIESCH**

B.S. Radiation
Health Physics,
2010

Submarine War-
fare Instructor and
Assistant Professor
of Naval Science

The Ohio State
University

Columbus, Ohio

“There were
19 women
selected
nationwide
to go on
submarines...”

Erienne Kriesch was an enlisted nuclear mechanic with the U.S. Navy during her undergraduate years at Oregon State. After graduating, she not only made it through an extremely competitive process to become a commissioned submarine warfare officer, she also made history by earning a place among the first small group of women assigned to serve onboard a submarine.

“Prior to my year group, the position was closed to women,” said Kriesch. “There were 19 women selected nationwide to go on submarines, and some didn’t make it through the training pipeline.”

It wasn’t easy being one of two nuclear-trained women on board with a crew of about 130 men, and adjustments were necessary. “There were a few growing pains at the beginning, but everyone was very professional and they all had a job to get done,” said Kriesch. “It was a difficult three years, but very rewarding.”

Kriesch said that her Oregon State training in radiation health physics uniquely prepared her for her position as an officer in charge of monitoring a submarine crew’s radiation exposure and occupational risks during deployment. “I was very prepared to make that transition,” she said.

She is currently serving as an assistant professor of naval science, but she recently passed exams qualifying her to become a high-ranking submarine officer in charge of all nuclear and support equipment aboard a submarine. She won’t learn what her new assignment is until June. “That’s what’s so exciting about the Navy — every few years you get a new assignment,” she said.



BRANDON PHILIPS

B.S. Computer Science, 2007
 Chief Technical Officer
 CoreOS, Inc.
 San Francisco, California

Brandon Philips met Alex Polvi ('07, Computer Science) in the Open Source Lab on campus during his freshman year at Oregon State, and the friendship was destined to become an important one for them both. "That lab experience is what helped accelerate our careers early on," said Philips. He and Polvi spent 15 to 20 hours a week in the lab applying programming fundamentals to real software development and building their leadership skills. Philips interned at NASA and IBM during his undergraduate years. After graduating, he spent several years as a developer and software engineer before he and Polvi decided to create their own company, CoreOS, Inc., in March 2013. The friends had recognized major challenges in

keeping critical backend software updated and secure, and they believed that they had a solution that would remove barriers and help organizations of all sizes accelerate their software delivery process. "Computer security rides on a razor-thin edge of working or not working, and we want to make it easy for organizations to protect their data by rolling out and using the most up-to-date software available in their clouds and data centers," said Philips. The market response to CoreOS's solutions has been swift, and it is now being used by some of the world's most successful companies. "We have a relatively small team and we have some of the largest companies in the world relying on us," said Philips. "We like to say that our goal is to secure the internet."

"...we have some of the largest companies in the world relying on us."



PATRICIA WALSH

B.S. Electrical Engineering and Computer Science, 2006
 Enterprise architect, Senior Product Owner, Mozido
 Principle Speaker, Blind Ambition
 Austin, Texas

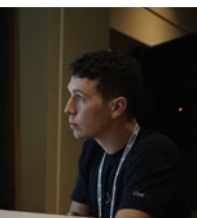
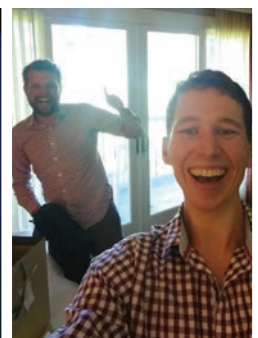
When Patricia Walsh first interviewed for a computer programming internship at Microsoft in 2004, they didn't know she was blind. "I purposely kept it pretty close to the chest," she said. "Once I was in, I proved myself capable, and my blindness was a nonissue." Walsh went to work for Microsoft two weeks after graduation. Her achievements included reducing code redundancy and implementing innovative ad products for MSN Video, Windows Live, and Silverlight. She earned a Gold Star when she found a coding issue that was costing the company \$40,000 per month. In 2011, she earned a master's in executive nonprofit leadership from Seattle University and wrote a book called *Blind Ambition: How to Envision Your Limitless Potent-*

tial. She gave a TEDx talk and has been a featured motivational speaker for the Society of Women Engineers, Microsoft, and other organizations. She loves influencing other women, including women with disabilities, to get involved in engineering. When Walsh began running at age 19, she had no idea that would mark the beginning of her career as a stellar athlete. "I just wanted some healthier habits," she said. Today, she is the world record holder for blind and low-vision Ironman distance, holds seven international gold medals, and is a 5-time national champion, triathlon athlete of the year, and USA representative for the 2016 Paralympics. As an enterprise architect at Mozido, Walsh advocates for technology standards as the organization grows its global reach.

"I proved myself capable, and my blindness was a nonissue."

Brandon—

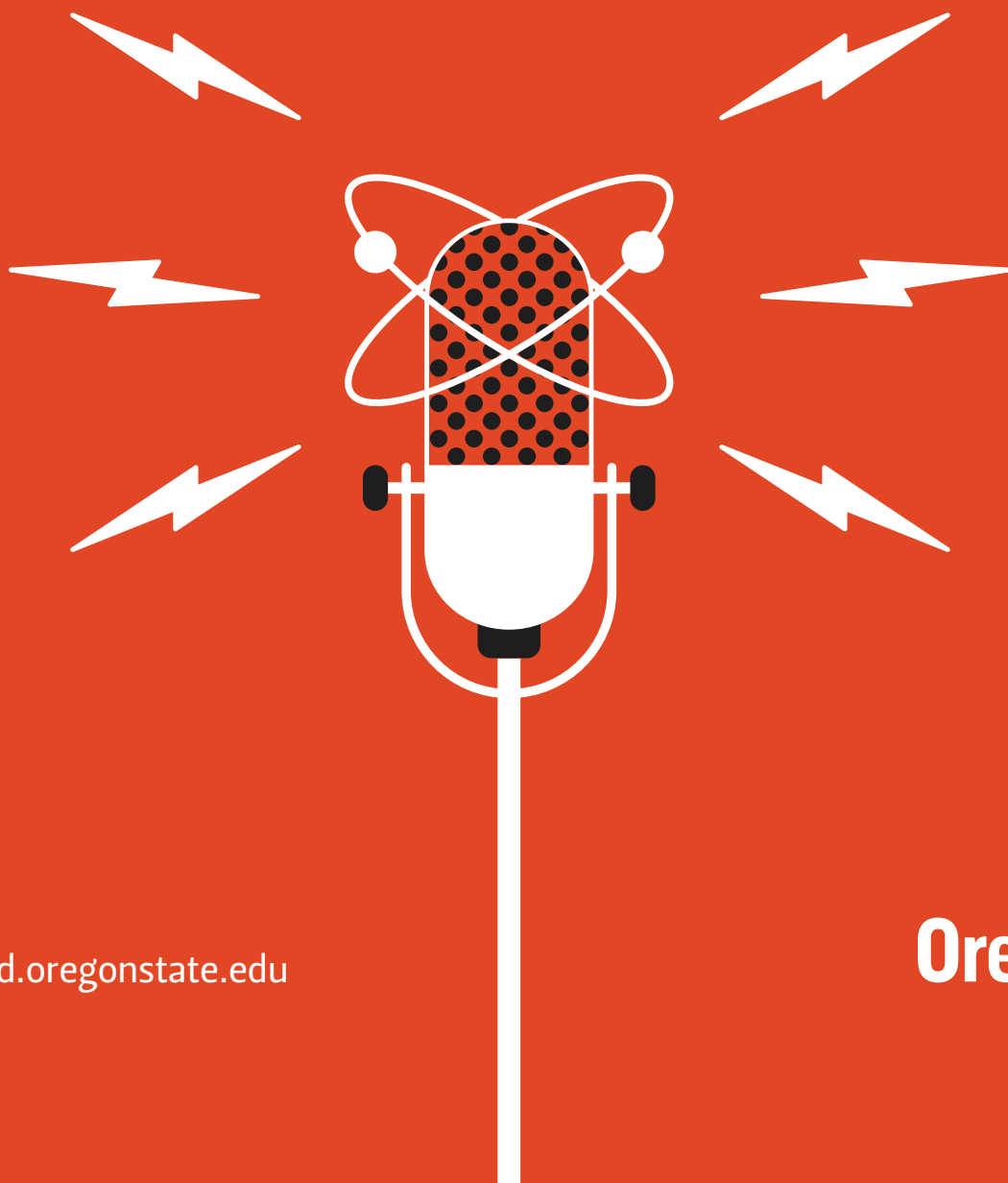
From your colleagues around the world, congratulations!
 We are proud to have you leading our company.



ENGINEERING OUT LOUD

a College of Engineering podcast

Stay connected with the latest in engineering research and innovation at Oregon State University through the College of Engineering's new podcast. Engineering Out Loud is dedicated to sharing the stories that keep Oregon State University on the forefront of research breakthroughs that are making an impact globally. Stream or download the full episodes directly from engineeringoutloud.oregonstate.edu, or search for Engineering Out Loud on iTunes or your favorite podcatcher.



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