

# OREGON STATE ENGINEERING AWARDS

MARCH 1, 2016



## FROM THE DEAN

# Educating global leaders in engineering



**W**e live in an increasingly complex and ever-evolving world, and we face issues and problems that no society has ever faced before. To be prepared for the opportunities offered by this state of the world, and the challenges it presents, engineers of the future will need a broader skill set than prior generations possessed. They will need to integrate broad knowledge across several engineering disciplines while cultivating deep expertise within a single domain, and they will need to communicate and collaborate across disciplines, cultures, and languages.

In recognition of these realities, the College of Engineering recently completed a strategic planning process. Our 2015-2020 plan seeks to ensure that the Oregon State Engineer™ demonstrates in-depth technical knowledge coupled with strong leadership skills, and is prepared to help create a better future for the generations to come.

We aim to produce graduates who are highly valued and in demand, who seek workable solutions to global challenges, and who know how to facilitate strong partnerships that are capable of responding to society's needs. We seek to become recognized as an inclusive and collaborative community that will produce graduates who drive change throughout their lives, to lead research and innovation that result in revolutionary breakthroughs, and to foster collaborative partnerships with industry, government, and academia.

At the 2016 Oregon Stater Awards Ceremony, we will proudly honor 13 Oregon State Engineers who collectively possess these qualities. They recognize the value of cross-disciplinary collaboration and networking. They have initiated best practices, fostered inclusiveness, and encouraged international cooperation. They have invented new technologies, guided teams to the next level of business enterprise, and nurtured engineers-in-training. In many cases, their day-to-day lives are filled with confronting issues that no one had conceived of a few decades ago.

It is engineers like these, and thousands more like them, who will help us reach our strategic goals. We are excited to create a better future alongside these amazing individuals.

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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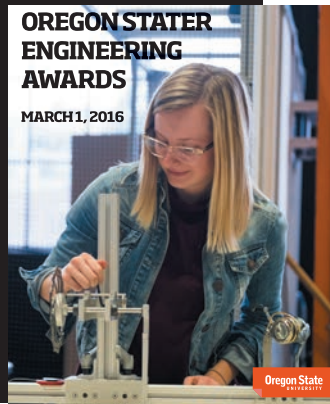
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Ph.D. candidate Samantha Hemleben works on an air hockey table in the Laboratory for Robotics and Applied Mechanics. A puck attached to a tether on the air hockey table simulates the movement of a jumping spider, and supports Assistant Professor Ross Hatton's research efforts to combine natural and robotic systems. (Photo by Mitch Lea)



# Oregon State UNIVERSITY

## College of Engineering

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## Engineering DEGREES

ONLINE

BEST  
ONLINE PROGRAMS

U.S. News & World Report

BACHELOR'S  
2016

Justin Ihara, B.S. in Computer Science  
Engineer, Micro Systems Engineering

Want to advance your career? Oregon State University is your path forward. Earn an **engineering management master's degree** or a **computer science post-baccalaureate degree** – both delivered 100 percent online by Oregon State Ecampus, a national leader in online education.

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ecampus.oregonstate.edu

## Welcome to the Oregon Stater Awards



Oregonian Media Group is proud to publish this special program commemorating the 2016 Oregon Stater Engineering Awards for the third year running. We're honored to have a role in recognizing some of the most prominent professionals in all of engineering.

The work accomplished by this distinguished alumni body drives progress and innovation throughout all fields of industry and science. Oregon State engineers' innovations have led to major advancements in health care, computer technologies, and even to digital and print publishing, to name just a few.

As the largest media outlet in the state of Oregon, we have the privilege of routinely reporting on Oregon State University's accomplishments across all academic fields of study. Engineering, however, is the field that best captures the imagination. For it is work that serves 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.

Steve Moss

President, Oregonian Media Group

# COLLEGE OF ENGINEERING AT A GLANCE



**T**he 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.



```
/* Congratulations, Jon DeVaan '85 */
/* 2016 College of Engineering Hall of Fame */
```

```
If education = Oregon State, Computer Science & Mathematics, Then
{
  your_career()
    = "Design Engineer and Manager, Microsoft Excel 1.0";
    = "Team Leader, Office Suite Development";
    = "Corporate Vice President, Windows Development";
    = "Board Chair, OSU Foundation";

  enduring_inspiration()
    = "Your pioneering leadership and your generous spirit
      inspire new generations of OSU students to achieve great
      things.";

  our_gratitude()
    = "Thank you for your extraordinary commitment to
      Oregon State University.";
}
```

## BY THE NUMBERS

### STUDENTS

(as of fall term, 2015)

Total: 8,265  
 Females: 1,597  
 Males: 6,668  
 International: 1,640  
 Minority: 1,766  
 Undergraduate students:  
 6,978  
 Average incoming GPA: 3.55  
 Average incoming SAT: 1,724  
 Honors College students: 465  
 Graduate students: 1,287  
 Average incoming GRE: 1,274

### FACULTY

Tenured/tenure-track: 168  
 Instructors: 30  
 Research personnel: 61  
 Staff: 69  
 Endowed positions and  
 professorships (>\$250K): 19

### FUNDING

(as of fall term, 2015)  
 Operational budget: \$105.4M  
 Research grants: \$40.3M  
 Annual private giving: \$13.5M  
 Scholarship support: \$1.9M

### DEGREE PROGRAMS

#### Undergraduate Majors

Bioengineering  
 Chemical Engineering  
 Civil Engineering  
 Computer Science

Construction Engineering  
 Management  
 Ecological Engineering  
 Electrical and Computer  
 Engineering  
 Environmental Engineering  
 Industrial Engineering  
 Manufacturing Engineering  
 Mechanical Engineering  
 Nuclear Engineering  
 Radiation Health Physics

#### Undergraduate Minors

Humanitarian Engineering

#### OSU Cascades Undergraduate Majors

Computer Science  
 Energy Systems Engineering

#### Graduate Majors

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

# ABOUT THE AWARDS

**I**N 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 less than 20 years of professional experience beyond their bachelor's degree.

## THE OCEAN takes care of us all

From glaciers through rivers, forests, valleys, coastlines and to the sea, Oregon State University is leading the charge to solve the greatest challenges facing the world's ocean and all who depend on it.

In Beaver Nation, we take care of the ocean.

[oregonstate.edu](http://oregonstate.edu)

Oregon State  
 UNIVERSITY



# HALL OF FAME



## JON DeVAAN

B.S. Mathematics, 1985

B.S. Computer Science, 1985

Honorary Doctorate, Engineering, 2011

Former Corporate Vice President, Microsoft

Social Activist

Seattle, Washington

**“Strategies have to match the times...the engineering system has to evolve also.”**

**A**lthough most people who use Microsoft products on a daily basis probably won't recognize his name, Jon DeVaan has had a huge impact on their lives. After graduating from Oregon State, he went to work for what was then a relatively unknown Seattle-based software company. During his nearly 30-year career at Microsoft, he was instrumental in building Windows® and Office, and developing the company's core engineering practices.

DeVaun began his career as a programmer on a database product called Microsoft File for the Macintosh. He uses the analogy of a grazing herd to describe the development model Microsoft used at that time: the engineers all worked on one thing for a while, before moving en masse to build a different product. Multiplan, which became Microsoft Excel for the Macintosh, was his herd's next new pasture.

During that time, computer applications were transitioning from character user interface programs, such as Lotus 1-2-3, to graphical user interfaces. The code complexity created by that shift caused several projects to fail. After his team finished optimizing Excel for the Windows platform, he began to seek a better engineering system.

“We had worked crazily hard — hundred-hour-plus weeks for months-long stretches,” he said. “We were very proud of the result, but we also realized that there was no way we could keep up that kind of pace.”

He started asking some key questions: “Did that old approach work? What could we do differently? It was the first time I realized that how you do things — improving the processes and practices — really matters. The notion of a development herd is an engineering system choice — an alternative is to create domain experts that improve on a technology over a longer period of time.”

As computer speed and memory capacity evolved, DeVaan was on

the leading edge of adapting work processes to keep up with changing possibilities and expectations.

He was instrumental in creating the vision and the processes that brought many fiercely independent engineering teams together to create the integrated product now known as Microsoft Office.

“Strategies have to match the times, and to create a product like Office, the engineering system has to evolve also,” he said.

By 1999, he was seeking new challenges, moving on to work on Microsoft's online and television presence. Over the ensuing years, the company had several software project failures, and in 2002, Bill Gates tapped DeVaan to improve the company's software engineering practices.

“I was able to take a step back, look at how the engineering was done, and lead people on the dis-

covery journey to make the right kind of adaptations so they could be successful with their software engineering again,” he said.

In 2006, DeVaan brought the new engineering principles to Windows as leader of the Windows Core Operating System Division, and led development for Windows 7, 8 and 8.1. He left Microsoft in early 2014.

After a full and successful career at Microsoft, DeVaan is not retired. Having become a software engineering expert, he is on to new passions. Today he calls himself a social activist. He is working on what he calls, “the most important issue of our time — to get money out of politics,” and on improving higher education. He recently joined the board of Represent.Us, and serves as chairman of the Oregon State University Foundation board of trustees.



AWARD

# ACADEMY OF DISTINGUISHED ENGINEERS


**DANIEL COLLINS**

B.S. Civil Engineering,  
1980

Manager, Western Region

Traylor Bros., Inc.

Long Beach, California

**D**an Collins has deep roots at Oregon State. His parents met while attending classes, and extended family members played key roles in constructing several buildings on campus. As an undergraduate, he worked summer jobs for the U.S. Geological Survey, Marion Construction Company, and CH2M HILL.

"Oregon State grounded me very well in the fundamentals of engineering, mathematics, and design," said Collins. A month away from graduation, he thought he would go into structural design, but a faculty member encouraged him to explore civil construction and landed him an interview with Lee Kearney at Kiewit.

At Kiewit, Collins quickly came up to speed in formwork design, surveying, cost control, scheduling, purchasing, and work planning. As his career pro-

**"Oregon State grounded me very well in the fundamentals of engineering, mathematics, and design."**

gressed, he honed his estimating skills on numerous marine projects. After a short break from Kiewit, he returned as a field superintendent.

When Kiewit was awarded the \$800

million San Joaquin Hills transportation corridor project — one of the first major design-build transportation projects in the United States — Collins became involved in design coordination, field engineering, supervision, and project management.

In March 1998, he moved on to Traylor Bros., where he has procured 15 major construction projects, including two post-Hurricane Katrina projects: a \$454 million widening of the Huey P. Long Bridge and a \$1 billion Gulf Intracoastal Waterway West Closure project for the U.S. Army Corps of Engineers. He is now a regional manager, with responsibility for procurement and operations.

Collins participates in Oregon State's Civil and Construction Engineering Industry Advisory Board, lectures on campus, and recruits Oregon State graduates for Traylor Bros.

**TRAYLOR**  
TRAYLOR BROS., INC.

Proudly congratulates Dan Collins on his 2016 Oregon Stater Award



Dan Collins, Western Region Manager  
OSU BS Civil Engineering '80  
2016 Distinguished Engineer

Traylor Bros., Inc. is proud to have you on our team!

[www.Traylor.com](http://www.Traylor.com)

# ACADEMY OF DISTINGUISHED ENGINEERS



**LISA  
GRAHAM**

B.S. Chemical Engineering, 1995  
Ph.D. Chemical Engineering, 1999  
Founder and CEO  
Alkemy Innovation Inc.  
Bend, Oregon

**L**isa Graham is a business leader who speaks science. The technical foundation Graham established at Oregon State gave her the skill set necessary to adapt research and development methodologies to diverse industries, including pharmaceuticals, chemical processing, wafer manufacturing, and agriculture.

As her career progressed, she supplemented her technical expertise with business development, technology development, strategic planning, financial planning, operations management, and other leadership skills.

After working as a senior engineer at Union Carbide, she moved into the pharmaceutical sector at Bend Research in 2002, eventually becoming a senior vice president. In 2014, she moved to Paradigm as chief scientist, where she was responsible for the growth of technology areas focused on data/systems analysis, sensor technology, software development, and

unmanned aerial vehicles in agriculture.

Most recently, Graham founded Alkemy Innovation, a company that will enable rapid data analytics and model development for scientists in numerous industries.

“There’s a challenge right now with big data, and an emphasis on being able to access that data and gain useful knowledge from it,” she said. “My company will develop science-based software solutions that provide specific technical guidance relevant to each industry.”

Graham has a strong passion for STEM education. “I didn’t get here on my own,” she said. “People have taken time they didn’t have to open doors for me.”

In that spirit, she serves as chair of Oregon Tech University’s governing board, a director on the Oregon governor’s STEM Investment Council, and member of the College of Engineering’s School of Chemical, Biological, and Environmental Engineering’s advisory board.

**“There’s a challenge right now with big data...”**



**MICHAEL  
STAPLETON**

B.S. Electrical Engineering, 1986  
Vice President and General Manager  
Power Solutions Division, ON Semiconductor  
Phoenix, Arizona

**M**ichael Stapleton has essentially had three careers — each one building on the previous one — since earning his bachelor’s degree. He credits Oregon State with giving him the foundation he needed to move seamlessly into each.

“Oregon State gave me a hands-on understanding of electronics, along with the theories and the math to go with it,” he said. “It gave me a breadth beyond electrical engineering — the chemistry, the mechanical engineering, the dynamics, the physics — being able to walk into a problem and theorize what was going on.”

Stapleton applied his electrical engineering skills at the Trojan nuclear power plant for three years, and then spent almost a decade with Anderson Controls in Kent, Washington. At Anderson, he helped numerous and diverse heavy manufacturers improve their businesses

by converting purely mechanical manufacturing systems to electronically driven systems.

“Those were very physical environments, so I was solving not just a circuit design problem but a physical problem,” he said, “And I got a lot of that ability — that skill set, that toolkit — from Oregon State.”

During his early career, he also earned a master’s in electrical engineering and a master’s in business administration with a focus on international business.

Stapleton’s next career started at Intel, where he helped to launch the first gigahertz processor. His current career began when he accepted a senior management position at ON Semiconductor in 2004. Today, he helps a broad customer base find smaller, lower-cost, higher-performance power solutions for building and delivering better products.

**“Oregon State gave me a hands-on understanding of electronics...”**



## AWARD

# ACADEMY OF DISTINGUISHED ENGINEERS


**KIRA SYKES**

B.S. Nuclear Engineering, 1991  
M.S. Environmental Engineering, 1994, with a  
minor in Radiation Health Physics  
Senior Radiological Project Manager  
CH2M HILL  
Portland, Oregon

**K**ira Sykes' career with CH2M HILL began as an undergraduate, and she was soon investigating two liquid waste disposal sites at the Hanford Site in Washington. The sites had been contaminated with radioactive wastes from a reactor that produced plutonium during the Cold War.

As a graduate student, Sykes conducted experiments on a special asphalt mix to test its potential use as an engineered cap over nuclear waste. "My professors maintained a direct link to industry and had relevant projects that used our research in real-life applications," she said.

Upon graduation, she set out to make a difference in the environment by "cleaning up the world one atom at a time."

"OSU set me apart from the pack," she said. "I was prepared to tackle complex environmental projects with the right tools for the job."

Sykes has gained extensive experience in design, construction, and operation for sites contaminated with military munitions and explosives, and various other toxic and radioactive wastes. She is now a senior radiological project manager in the company's nuclear and environment sector, serving federal and commercial clients that are dealing with radioactive materials.

She offers innovative solutions to site closures and has consulted for more than 30 U.S. clients in diverse industries, including mining, aerospace, the military, the chemical industry, and the federal government. Her specialty is implementing complex multi-million dollar environmental projects with multiple, competing regulatory requirements. A current focus is assisting the U.S. Navy in determining their general radiological material liabilities at air stations, weapon stations, and shipyards.

**"Cleaning up the world  
one atom at a time."**


**JOE WEBER**

B.S., Industrial Engineering, 1984  
Vice President, Global Sales  
ESCO Corporation  
Portland, Oregon

**J**oe Weber graduated from Oregon State on a Friday and went to work for ESCO Corporation on a Monday. Within 15 years, he was president of the company's wholly owned subsidiary in Cleveland.

Weber's core strengths include turning around struggling business units, building successful teams, and mentoring and coaching motivated young businesspeople.

"I'm always looking for those who want to be more than engineers — to go on to lead and manage and take on different challenges in leadership," he said.

His career has taken him to numerous locations in the United States and around the world. One of the accomplishments he is most proud of is opening the first vacuum-cast aerospace foundry in Mexico. He hired nearly all staff from the local population and built a still-thriving business unit.

Weber has traveled for business and pleasure to more than 30 countries in the past 30 years, and he tries to pass along his passion for travel to the young people he works with.

"If you get out, get abroad, you get a much broader perspective — it helps round you out and you become a better leader and manager of people," he said.

ESCO is one of the largest Oregon-based manufacturers and about 75 percent of the company's engineers are Oregon State graduates, so Weber ends up helping numerous Beavers build their careers around the world.

As a member of the Oregon Workforce Investment Board, Weber works with other industry and government leaders in the state in an effort to improve the state's workforce and economic prosperity.

**"I'm always looking for those  
who want to be more than  
engineers."**

# COUNCIL OF OUTSTANDING EARLY CAREER ENGINEERS



**MICHAEL  
BAK**

M.S. Radiation  
Health Physics,  
2003

Physical Security  
Specialist Nuclear

Federal Bureau of  
Investigation

Quantico, Virginia

**M**ichael Bak was working toward a bachelor's degree in geology at State University of New York at Albany when he became interested in storing radioactive waste in the ground. After discovering that Oregon State had one of the best radiation programs in the nation, he headed to Oregon.

His graduate work focused on decommissioning the Trojan Nuclear Power Plant. After graduation, he went to work at a Superfund site in Denver, where he gained valuable field experience.

"I learned how to work in the field and swing a meter and basically do all the grunt work at a radiation site," said Bak. "That was a great experience, which helped me throughout my career."

Bak spent a short time at a multinational biopharmaceutical company, and then landed a job back home with the New York City Department of Health and Mental Hygiene. In 2007, he transferred to the counterterrorism unit of the New York City Police Department, where he was responsible for responding to any situation that might involve the illegal use of radiation.

In 2010, Bak joined the Federal Bureau of Investigation, where he now supports field agents during major events and crime scenes that could involve hazardous materials. He also trains law enforcement professionals in radiation preparedness around the world.

"Basically, our job is to support the field agents and make their lives easier — help them get their jobs done the proper way and the safe way," he said. "If I can help law enforcement personnel get home to their families safely, that's what I'd like to do."



**BETO  
DANTAS**

B.S. Chemical  
Engineering, 1997

Vice President  
of Marketing,  
Strategy and  
Innovation

ConMet

Vancouver,  
Washington

**B**eto Dantas began his undergraduate education at Universidade Federal do Rio Grande do Norte in his hometown of Natal, Brazil, and finished at Oregon State. He got his first job by participating in the Multiple Engineering Cooperative Program (MECOP) as an intern with Merix in Forest Grove, Oregon.

While at Merix, Dantas developed an interest in connecting customer ideas to technology and was transferred to the San Francisco Bay Area as an account manager. In 2000, he returned to Oregon as regional sales manager with Hallmark Circuits, and later became vice president of business development for the Americas and Europe with Multek.

The next step up the ladder was a move to Multek's parent company, Flextronics, where Dantas ultimately concluded his time with the company as vice president of innovation and new ventures. He recently joined ConMet.

Dantas said that the education he received at Oregon State gave him the tools necessary to be adaptable in his career. "I've had varying degrees of responsibilities, and every job was slightly different from the other," he said. "Oregon State helped me be adaptable and an effective problem solver."

Creating a strong business network, which dates back to his first job after college, has been a critical part of his success. "Nothing in this world gets accomplished alone — you never do anything by yourself," he said.

In that vein, he remains an active champion for MECOP at ConMet, believing that a company is stronger when it engages early career talent.

**"Nothing in this world gets accomplished alone — you never do anything by yourself."**



**NEIL  
FERNANDO**

B.S. Civil  
Engineering, 1997

Owner

Emerio Design,  
L.L.C.

Beaverton, Oregon

**N**eil Fernando was born in Sri Lanka and spent extended periods of his youth in Africa. His introduction to civil engineering began in Botswana while he was selling pumps and other water-related equipment. In the course of his duties, he frequently met with civil engineers.

"I thought it would be cool if I could be one of those people someday," said Fernando. Due to limited opportunities to receive higher education where he was living, he applied to Oregon State through the International Cultural Service Program.

While at Oregon State, Fernando spent three years as coordinator for the Asian Cultural Center. During that time, he coordinated programs, developed skills in conflict resolution, budgeting, and project management, and learned how to deliver bad news to good people. "In a nutshell, I learned the how-to's of being a leader," he said.

He began his career at engineering firms in Portland, Oregon. In 2005, he founded Emerio Design, and has established a stellar reputation among architects, contractors, public agency personnel, and property developers as a responsive and creative problem solver and project manager. Emerio Design is one of the only engineering firms in Oregon that offers services ranging from feasibility to final permit in-house.

Last year, Fernando established an endowment through the OSU Foundation to support at least one student on a full scholarship.

"Somebody paid for me to go to school, so I'm trying to pay it forward," he said. "Oregon State did what no one has ever done for me, and I'm eternally grateful for that."

**"Oregon State did what no one has ever done for me, and I'm eternally grateful for that."**

**"If I can help law enforcement personnel get home to their families safely, that's what I'd like to do."**



## LANE INMAN

B.S. Mechanical  
Engineering, 1993

Senior Vice  
President,  
Enterprise  
Operations

PNC Financial  
Services

Pittsburgh,  
Pennsylvania

**A**fter graduating from Oregon State, Lane Inman began his information technology career at Sequent Computer Systems while earning a master's in engineering management from Portland State University. In 1998, he became a consultant for VERITAS Software and completed a Ph.D. in systems science.

As a business leader with more than 20 years of experience in information technology, Inman has had roles in operations, customer support, consulting, and product management. He was principal architect at VMware and then founded Aisle Five Consulting, where he focused on private cloud and technical architecture.

After selling Aisle Five to spend more time with his family, he went to work for Visa, where he was responsible for adopting and propagating converged infrastructures, and affecting

organizational change. He joined PNC Financial Services in 2014 and is now responsible for transforming the operating model toward a cloud-based infrastructure.

Inman believes that his mechanical engineering degree established a strong problem-solving mindset that continues to serve him well.

"It stressed a lot of skills that more traditional computer science didn't cover," he said. Had robotics been offered while he was at Oregon State, he would have been interested in taking that path. "Some of my favorite classes were control and design."

He is particularly proud of initiating numerous best practices in many of the companies he has worked for, and of mentoring others who have directly influenced the industry.

"I'm most proud of being able to help people transform the way they've done business," he said.

**"I'm most proud of being able to help people transform the way they've done business."**



## JANICE LEVENHAGEN- SEELEY

B.S. Computer  
Engineering, 2006

Executive Director

ChickTech

Portland, Oregon

**J**anice Levenhagen-Seeley's passion for women's equality and her desire to improve the diversity and culture of the technology industry led her to develop ChickTech four years ago. ChickTech is a national nonprofit organization that focuses on retaining women in the technology workforce and increasing the number of women and girls pursuing technology-based careers.

"When I look at ChickTech, it's a reflection of what I experienced," said Levenhagen-Seeley, referring to the struggles she had as a female in a predominately male field of endeavor. "My goal is to combat what I was feeling at different points in my career."

Levenhagen-Seeley excelled at math as a high schooler, but she wasn't given the same opportunities as her male peers. "I did better than all the boys who were on the math team, but they were all pushed to go into a class called AP C++, and ... I didn't even find out about it until it had already started," she said,

**"My goal is to combat what I was feeling at different points in my career."**

as a way of explaining the early challenges she faced.

The challenges continued as she began working at various technology companies. "I had imposter syndrome really bad, and just never felt like I belonged. I felt so completely different," she said.

She was inspired to start the nonprofit while working as a consultant. "One of my main clients was volunteering at an event to encourage minorities to go into technology," she said. "That inspired me to create ChickTech. I could see the potential — how I could impact other girls and women so they wouldn't have the experiences I had."



## BEN NADER

B.S. Electrical  
Engineering, 2007

CEO and founder  
Butterfleye, Inc.

San Francisco Bay  
Area, California

**B**en Nader was born in Iran, where he lived until emigrating to the United States in his teens. His lifelong passion for tinkering and building things, especially electronic devices, crossed the Atlantic with him.

As an undergraduate at Oregon State, Nader gained a full year of real work experience through the Multiple Engineering Cooperative Program. Upon graduation, he was offered a position at Intel, but decided to take another offer from Maxim Integrated in San Jose, California, where he eventually moved into product management.

Living in the Bay Area had its drawbacks, and one of them was that people kept breaking into his home and stealing his personal property.

"I couldn't afford a sophisticated security system, but I needed a sim-

ple way to keep an eye on things I care about," he said. So he invented the world's smartest security camera.

Nader and his team, which includes his brother (Brandon Nader, '14 Business Administration) raised \$2.3 million in startup capital and launched a company and a product called Butterfleye. Sixty days from shipping, the company already has \$600,000 in presales.

Nader has always loved the idea of being an entrepreneur, and he draws inspiration from the bold move his parents made in moving the family to a new country.

"Basically, you leave your life behind with the hope of a better life," he said. "It's the same with starting a new business — you have to move out of your comfort zone. I like to think about being an entrepreneur of life."

**"I like to think about being an entrepreneur of life."**



## CARMEN ADELA VELASCO

M.S. Chemical  
Engineering, 2008

Ph.D. Candidate,  
Graduate Assistant

Environmental  
Engineering

University of New  
Mexico

Albuquerque, New  
Mexico

**C**armen Velasco completed her undergraduate work at Universidad San Francisco de Quito in her home country, Ecuador, before completing a master's degree at Oregon State. After graduation, she worked for two years as a process engineer at Pace International in the State of Washington before

moving back home to lead the science team at Bustamante y Bustamante, an intellectual property law firm, and teach as a visiting professor at her alma mater.

In 2010, the Spain government offered Velasco a full scholarship to earn a second master's degree in environmental management, after which she returned again to Ecuador to join the National Department of Environmental Health. Because of her commitment to facilitating the relationships among industry and government representatives to reduce pollution and improve

environmental health, she was soon promoted to director.

As director, she led the development of national public policy in environmental health, coordinated activities of the department relating to environmental impacts on human health, and oversaw regulation enforcement. Even though her background was in chemical

engineering rather than environmental health, she was able to apply the skills she learned as an engineer to an entirely different field.

"I think I did it and did it well because of my engineering background," she said. "We are trained to solve problems."

In April 2015, Velasco joined the Chemical Engineering Department at Universidad Central del Ecuador as a full-time professor, but recently returned to the United States to work toward a Ph.D. in environmental engineering at the University of New Mexico in Albuquerque, New Mexico.

**"We are trained to solve problems."**

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