

COLLEGE OF ENGINEERING

OREGON STATER ENGINEERING AWARDS

FEBRUARY 21, 2014

CELEBRATING THE
OREGON STATE ENGINEER

Oregon State
UNIVERSITY



Rising to the challenge of excellence

The College of Engineering Oregon Stater Award winners exemplify our culture of excellence and our deep-rooted commitment to doing things that matter. The 13 engineers profiled in this publication represent the qualities and achievements we are most proud of in our graduates.

These honorees have laid the foundation for fundamental technologies, such as digital imaging and GPS systems. They are working toward understanding the ecological effects of nuclear accidents and developing new drugs to treat cancer.

They are building corporations and launching ventures that provide livelihood for thousands of people. At home and abroad, the impact of



Scott A. Ashford

their work spans multiple industry sectors and disciplines, and we are delighted to claim them as Oregon State engineers.

Although we are honoring these 13 Oregon Staters in this publication, we could easily have expanded the list. These are just a few examples of the more than 30,000 extraordinary engineers who routinely make positive impacts in people's lives.

As we expand our research programs, build industry collaborations, and spin out new companies, the College of Engineering continues to contribute to economic development in Oregon and throughout the world. Our steady growth is a result of program excellence. We have built exceptional research programs in many areas, including robotics, computing, infrastructure, materials, engineering education, and more. As we move forward, we are

adding new programs that broaden our scope and extend our reach in targeted areas, always focusing on excellence and depth in the fundamental disciplines.

Keeping our vision at the forefront and applying our core values in all aspects of our work together, we are building the college's capacity to graduate more high-caliber engineers like those we are honoring here. Together, we will continue to tackle the world's most formidable engineering and scientific challenges.

Go Beavs!

*Scott A. Ashford
Dean, College of Engineering
Oregon State University*

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Alexandria Moseley,
'12, B.S.,
Manufacturing, B.S.,
Industrial
Engineering

(Photography by:
Karl Maasdam
Photography)

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The Oregon State Engineer

The world benefits when its citizens think critically and consider diverse perspectives, and the College of Engineering produces such citizens — a unique class of engineers who possess a strong technical foundation strengthened by a broad worldview. Whether they are current students, mid-career

professionals, or national leaders in their respective communities, they are successful at achieving balance in numerous areas.

Oregon State Engineers find balance between book learning and practical skills, between developing a broad foundation and a focused specialization, and between a deep

understanding of their chosen discipline and professional competencies such as communication, global awareness, and critical thinking.

They relentlessly question assumptions and continually look for better ways to do things.

They know the true meaning of teamwork and are a product of the

low-wall, collaborative environment they experience at Oregon State.

In short, we consistently produce a community of high achievers whose collective innovation and leadership are helping to solve the world's most formidable challenges.

We invite you to meet a few of our Oregon State Engineers:

Brad Heller



self too seriously.

Brad Heller, director of engineering for Cloudability, works hard and plays hard. He's brilliant, yet he doesn't take him-

'09, B.S. Computer Science

(For example, he might head to the video game store at midnight to get his hands on the much-anticipated release of Grand Theft Auto V.) Cloudability is one of Portland's most-buzzed about new tech companies.

Jen-Hsun Huang



field. Huang's distinctive orientation to competition is not about beating

Jen-Hsun Huang transformed visual computing with the invention of the GPU. His company, NVIDIA, continues to drive innovation in the

'84, B.S. Electrical Engineering

his competitors but about making a unique contribution among them. He sets the bar high, and continually strives for excellence.

He has received awards for entrepreneurship, leadership, and engineering management.

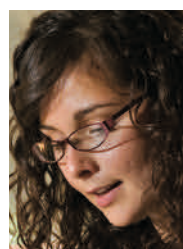
Kristina Milaj



Kristina Milaj, a civil engineering senior and member of Engineers Without Borders, represents a new breed of engineers

who feel a greater sense of global responsibility. The student group she volunteered with recently completed a multi-year project by installing two wells and a rainwater catchment system that made clean water more accessible to the small Kenyan community of Lela.

Alexandria Moseley



students in the United States by National Engineers Week and made the "30 Under 30" list compiled by the

Alexandria Moseley was a four-year recipient of the Al Trommershausen Scholarship. She was named one of the top 15 engineering

'12, B.S. Manufacturing, B.S. Industrial Engineering

Society of Manufacturing Engineers. Moseley is just one example out of a growing and accomplished student body at the College of Engineering, where undergraduate enrollment is among the top five percent of all domestic engineering colleges.

Jose Reyes



He envisioned a nuclear power

Jose Reyes is an internationally recognized expert on passive safety system design, testing, and operations for nuclear power plants.

reactor that could be manufactured in a factory and transported to wherever it was needed.

He currently serves as chief technology officer for NuScale to bring this concept closer to reality. Reyes is committed to taking research expertise through startup and commercialization.

Kenneth Williamson



school head at Oregon State.

Kenneth Williamson is an emeritus professor who dedicated 40 years of his life to research and education as a faculty member and

'68 B.S. Civil Engineering, '70 M.S. Environmental Engineering

His caring for humanity, for community, and for individuals has been demonstrated time and again throughout his professional career.

Welcome to the 2014 Oregon Stater Engineering Awards



Oregonian Media Group is proud to be the publisher of this special program commemorating the 2014 Oregon Stater Engineering Awards. We're honored to have a small part in recognizing some of the most prominent professionals in all of engineering.

The work accomplished by this distinguished Oregon State University alumni body has driven progress and innovation throughout all fields of industry, from biological, civil, electrical, mechanical and nuclear engineering, to forest engineering



OREGONIAN MEDIA GROUP

and materials science. OSU engineers' innovations have led to major advancements in health care, computer technologies, and even to print and digital publishing, to name just a few.

As an OSU grad (class of '72), I've had the pleasure of knowing personally and observing the professional growth of many OSU engineering graduates. Their

work serves science and 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.

N. Christian Anderson, III
President, Oregonian Media Group



A University Transformed

Through the generosity of **more than 102,000 donors**, Oregon State University has surpassed \$1 billion in its first capital campaign—with donors to the College of Engineering investing more than \$210 million.

Congratulations to the winners of the 2014 Oregon Stater Engineering Awards. You inspire us to reach even higher.

 The
Campaign
for OSU

Computer Science Degree Online

Ato Jackson-Kuofe
2013 OSU Ecampus graduate,
B.S. in Computer Science



Earn a second bachelor's in computer science online in one year and diversify your career options. Oregon State's College of Engineering offers a unique post-baccalaureate program delivered through OSU Ecampus – a national leader in online education.

LEARN MORE: ecampus.oregonstate.edu/stater2014

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 34,000 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.

STUDENTS

Total students: 6,758

Males: 5,617

Females: 1,141

International: 1,354

Minority: 1,210

Undergraduate students: 5,682

Average incoming GPA: 3.54

Average incoming SAT: 1721

Graduate students: 1,076

Average incoming GRE: 1224

FUNDING

Operational budget: \$81.7M

Research grants: \$34M

Annual private giving: \$16.2M

Scholarship Support: \$8.3M

FACULTY

Tenured/tenure-track: 153

Instructors: 31

Research Personnel: 64

Endowed positions and professorships (>\$250K): 17

UNDERGRADUATE

Bioengineering

Chemical Engineering

Civil Engineering

(undergraduate continued)

Computer Science

Computer Science (OSU-Cascades)

Construction Engineering Management

Ecological Engineering

Electrical and Computer Engineering

Environmental Engineering

Energy Systems Engineering (OSU-Cascades)

Industrial Engineering

Manufacturing Engineering

Mechanical Engineering

Nuclear Engineering

Radiation Health Physics

GRADUATE

Biological and Ecological Engineering

Chemical Engineering

Civil Engineering

Computer Science

Electrical and Computer Engineering

Engineering Management

Environmental Engineering

Industrial Engineering

Materials Science

Mechanical Engineering

Medical Physics (in partnership with OHSU)

Nuclear Engineering

Radiation Health Physics



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

Oregon Stater Engineering Awards

Hall of Fame

James (Jim) R. Plasker

B.S. Civil Engineering, 1971
M.S. Civil Engineering, 1973
Executive Director, American Society for Photogrammetry and Remote Sensing (Retired)
Bethesda, Md.

During his 40 years in the workforce, James (Jim) Plasker has played an integral role in advancing the geospatial technology sector. He began his career when satellite-based surveying, computer-based mapping, and digital imaging were nonexistent, and later saw the rise of all three.



In the late 1970s and early 1980s, Plasker participated in classified meetings for what would become a

seminal geospatial tool and a household name just two decades later: Global Positioning Systems (GPS). During the 1980s, he contributed to early efforts to convert analog maps to a computerized database to support the 1990 Census. In 1989, he led the effort to create a digital orthophoto (image map) program for the U.S.

If it weren't for Oregon State, Plasker would not have been able to build such an accomplished career.

"I came to Oregon State as a fairly young freshman and with almost no leadership experience," he said. "I left Oregon State with not only two degrees but a tremendous set of leadership skills and multiple experiences working with senior officials on campus, all which served me very well as I progressed through my career."



Jim Plasker with his wife Billie in Uluru National Park during a recent business trip to Australia.

Robert Schultz, a professor of geomatics, was also an influential mentor, both in Plasker's career and life.

"Not only did Professor Schultz espouse the importance of leadership and professional development, he demonstrated them as well," he said.

In addition to the technical engineering skills he developed, Plasker participated in several professional organizations as a student, including the American Society of Civil Engineers, the American Congress on Surveying and Mapping (he eventually served as president of the organization from 1996-97), and the American Society for Photogrammetry and Remote Sensing. These extracurricular activities further honed

his leadership skills and prepared him for the workforce.

After earning a B.S. in 1971 and an M.S. in 1973, both in civil engineering, Plasker spent 26 years in sur-

veying and mapping with the U.S. Geological Survey. He served as the associate chief of the National Mapping Division from 1994 to 1996 and as the associate chief geologist from 1996 to 1998. During his tenure, he was responsible for the development of the U.S. National Aerial Photography and National Digital Orthophotoquad Programs, which provided the

initial imagery database for what would eventually become Google Earth and numerous other web-based mapping systems. He was also responsible for the development of

the Digital Raster Graphic Program through close cooperation with the private sector.

Plasker recently retired as the executive director of the American Society for Photogrammetry and Remote Sensing, a 6,500 member professional and scientific nonprofit organization focused on the development and exchange of information about cutting-edge geospatial information technologies. He also served as executive director of the ASPRS Foundation from 2004-2013, where he transformed the organization to complete the full endowment of all awards and scholarships the organization bestows; effective with his retirement, he was appointed to serve on the Foundation's Board of Trustees.

Plasker has participated in or led numerous international delegations representing the geospatial profession in United States, including delegations sent to China, Russia, and Chile. In 1994, he was the recipient of the U.S. Department of the Interior's highest honor, the Distinguished Service Award. From 1997 to 2003, he chaired a multi-organizational task force to rewrite the National Council of Examiners for Engineering and Surveying model law and model rules for surveying.

Speaking from experience, Plasker encourages today's engineering student to invest in a wide range of professional development opportunities.

"If you're at OSU in engineering, think more broadly than just academics," he said. "Any extracurricular leadership development opportunities you can take advantage of will serve you well, and will likely significantly increase your employability and potential salary."

"If you're at OSU in engineering, think more broadly than just academics. Any extracurricular leadership development opportunities you can take advantage of will serve you well, and will likely significantly increase your employability and potential salary."

Hall of Fame

William D. Turner

B.S. Electrical Engineering, 1963
Member of Research Staff,
Xerox Corporation (Retired)
Waldport, Ore.

William (Bill) Turner grew up in the 1940s and 50s in a small town in rural Lincoln County, Ore., and completed the first eight grades of school in the same classroom. Since then, he has built an accomplished career and helped establish the roadmap for digital document technologies as a long-time

researcher at Xerox Corporation.

Turner got his footings in engineering at Oregon State University, where he earned a B.S. in electrical engineering in 1963. He developed an interest



in high-speed digital circuits while working on a project at Oregon State that was funded by a grant from the National Science Foundation. He was encouraged to pursue further education in computer technology by two influential mentors, Rod Mesecar and Solon Stone.

Oregon State provided Turner with a well-rounded education, preparing him for his first professional stint at General Electric. There, he worked on the early development of digital integrated circuits for large mainframe computers.

“At Oregon State, we learned a lot about how to build things and came away with an understanding that engineering involved a lot of different and in-



Bill Turner tutoring students at Waldport High School.

teresting facets. There was economics involved and other dimensions besides just creating things. That prepared me to go into research and development at General Electric’s Computer Department,” he said.

After General Electric, Turner continued to build on his successes. He joined Xerox to help form the Advanced Development Laboratory as part of the new Palo Alto Research Center. During his 27 years there, he worked

on device and system research for electronic documents. He also helped to develop technology for printing,

x-ray image capture, document scanning, and displays. In 1981, he shared the Kingslake Medal for his work on high-resolution digital image capture. He holds more than 25 patents on semiconductor devices and applications, and was instrumental in advancing new technologies that have shaped global business and personal computing.

The industry has changed dramatically during Turner’s decades-long career. He remembers getting his first email address in 1974, and it bears little resemblance to what much of the world uses today. He recalled a time when computers were much larger and less powerful.

“When I first started my career, computers were built out of hundreds and hundreds of transistors on

circuit cards, and when I retired, the whole computer was on one chip. And it was a million times more powerful and several million times faster,” he said.

Even though technology has evolved rapidly in Turner’s time, his advice for future engineers is timeless: “Learn how things are made so that you can make them yourself. Learn how software works so you can run them.”

In 1998, he retired from Xerox and returned to Oregon, where he established a consulting practice for technology transfer.

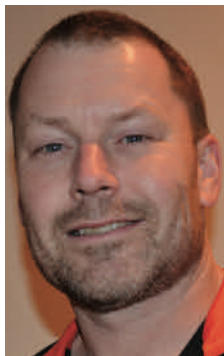
Turner and his wife Jean live in Waldport, on the Oregon coast. They are involved in many volunteer activities that support local schools and government.

Academy of Distinguished Engineers

Peter Oosterhof

B.S. Computer Science, 1987
Partner Development Manager,
Microsoft
Redmond, Wash.

Peter Oosterhof started as an electrical engineering major at Oregon State University, but found the thrill of programming irresistible and changed his major to computer science after his sophomore year. He earned his degree in 1987 and began to hone his intense interest in software development.



He spent two years working as a software engineer at Tektronix before moving

to Microsoft. Early in his career at Microsoft, he was part of the team that developed Microsoft Word. In his current role as partner development manager, he manages all servers, networking equipment, and power infrastructure in multiple data centers around the world to support Microsoft Online Services, such as Bing and Azure.

Oosterhof was part of the Microsoft Autopilot Team that won

the 2013 Outstanding Technical Achievement Award for their work on optimizing the deployment and management of servers on a massive scale.

The award recognizes an innovative technical achievement that has profoundly transformed the world of software and addressed some of the most urgent technological challenges.

Oosterhof has motivated a new generation of computer professionals by returning to the Oregon State campus and sharing the skills and attitudes necessary for success in the software industry. He said there are many opportunities for up-and-coming programmers and computer science graduates.

“Software development as an industry is incredibly young and changing dramatically. There’s a huge amount of opportunity that exists today and will continue to exist.”

“Software development as an industry is incredibly young and changing dramatically,” he said.

“There’s a huge amount of opportunity that exists today and will continue to exist.”

Benjamin C. Rivera

B.S. Mechanical Engineering, 1990
President, Leatherman Tool
Portland, Ore.

Benjamin Rivera had three job offers after graduation and turned down the most lucrative one to work for Leatherman Tool. To this day, he doesn’t regret the decision.

“It sounds cliché, but I believe I’m successful because I do what I love. I get up every day and get excited to go to work. That’s my definition of success,” he said.

Today, Rivera is the president of Leatherman, the flagship multi-purpose tool company that has more than \$100 million in annual revenue and more than 500 employees in the Portland area. During his 20-plus years in helping to build the company, he has achieved many noteworthy accomplishments, including more than 100 U.S. patents for his work as a product design engineer. In addition, his design for the WAVE Leatherman tool is part

“I get up every day and get excited to go to work. That’s my definition of success.”



of the permanent collection within the Museum of Modern Art in New York.

As a mechanical engineering student at Oregon State, Rivera’s social network was equally important to academics. He developed a circle of friends who later became professional peers. Close mentorship from Professor James Welty further developed his people skills and enabled him to become a well-rounded professional. As a result, he’s had the opportunity to pursue many different facets of engineering, from management to intellectual property.

“Engineering is a great profession because you can become so many things,” he said. “There’s a lot of flexibility and opportunity.”

Oregon State University
College of Engineering



Academy of Distinguished Engineers

Thomas A. Teramura

B.S. Mechanical Engineering, 1983
Vice President of Technology and
Innovations, PCC Structural
Portland, Ore.

One of Thomas Teramura's fondest memories as a student at Oregon State is racing a derby car made from old bicycle parts and junkyard metals during a competition for Engineering Day. He was the driver and won first place. "It was a little scary because we didn't have the best materials," he recalled.



After 30 years in the casting industry, Teramura has worked with some of the most high-performing materials in the world, and in diverse roles, including product engineering, engineering management, and plant management. Today, he serves as vice president of technology and

innovations for PCC Structural, a division of Precision Castparts Corporation. His contributions have

"Connect with people. Even though we talk about automation as a result of new technologies, it still takes people to build, service, sell, and buy these things."

been integral to the development and industrialization of some of the largest, most sophisticated, and complex investment castings in exotic titanium and superalloy materials in the world. He holds a patent in ceramics materials and is accomplished in developing new processes.

As a leader in a cutting-edge industry, Teramura stresses the fundamental value of people in business and engineering.

"Connect with people," he said. "Even though we talk about automation as a result of new technologies, it still takes people to build, service, sell, and buy these things."

been integral to the development and industrialization of some of the largest, most sophisticated, and complex investment castings in exotic titanium and superalloy

John F. Yerke

B.S. Chemical Engineering, 1975
M.S. Chemistry, 1975
Vice President of Manufacturing
- Cellulose Fibers, Weyerhaeuser
Company
Federal Way, Wash.

John Yerke calls himself a "purveyor of people," because of his passion for mentoring developing engineers to make sure they acquire the right skills to succeed and fulfill their career ambitions. He juggles this on top of managing an eight paper mill manufacturing system around the globe.



Before his career climb in the pulp and paper industry, Yerke intended to earn a Ph.D. in chemistry at Oregon State, but his priorities changed after meeting his future wife. He also met a chemical engineering professor named Chuck Wicks, who suggested that he take coursework in

chemical engineering. Yerke took his advice and earned a B.S. in chemical engineering and an M.S. in chemistry in the same year.

"The basics of chemical engineering absolutely provided me with the disciplined thought process necessary for business today - to be detail-oriented and make sound decisions."

employees."

Even though his career these days has less to do with detailed chemical engineering, his educational experiences provided essential skills that he still uses.

"The basics of chemical engineering absolutely provided me with the disciplined thought process necessary for business today - to be detail-oriented and make sound decisions," he said.

"I appreciated the care and the desire that Prof. Wicks had in developing students. It was next to none," said Yerke.

"The time he took in helping me develop my career is something I try to do with younger

Lee R. Zink

B.S. Construction Engineering
Management, 1985
Area Manager,
Kiewit Infrastructure West
Vancouver, Wash.

Lee Zink remembers a class at Oregon State where the professor had students count nails as part of an estimating exercise to determine material costs.

The students balked, skeptical that something so tiny could have any tangible effect on the final estimate. But the professor's meticulous na-

ture taught Zink that details matter, a valuable lesson that refined his



skills as a student. "Oregon State really helped me grow and develop my personal aptitudes. It was a good fit for my skills and a great place to live," he said.

Following graduation in 1985, Zink began his career with the Kiewit Companies, initially from its divisional office in

"Over the years, I've had the opportunity to build a lot of builders, and they go on to build other builders."

Vancouver, Wash. Since then, he has been involved in many heavy construction projects, including the Schuster Parkway interchange with I-5 in Tacoma, the West Seattle swing bridge, and the new locks at Bonneville Dam.

His work has taken him to Hawaii, Boston, the San Francisco Bay Area,

Quebec, and the Pacific Northwest.

Besides his own engineering work, he's proud to have helped several young construction engineers start their careers. "Over the years, I've had the opportunity to build a lot of builders, and they go on to build other builders."

Through his journeys of college and career, Zink and his wife Tonia have been together since beginning college at Oregon State.

His journey has included three wonderful children and many rich experiences around the country.

Council of Outstanding Early Career Engineers

Chal S. Davidson

B.S. Nuclear Engineering, 2001
President and
Chief Executive Officer,
SuperCritical Technologies, Inc.
Seattle, Wash.

Chal Davidson is part engineer, part entrepreneur. Besides recently starting SuperCritical Technologies, he's held positions at Intellectual Ventures and Lockheed Martin, managed restaurants, start-

ed a brewery, and helped build a custom-home construction company. His diverse experience is somewhat of a professional philosophy for Davidson, who believes that learning is a life-long pursuit.

"People need to do a lot of differ-



ent things to keep the mind stimulated," he said. "Obviously you don't want to just jump from job to job, but the person who stays in the same position for his or her whole life doesn't exist anymore."

In his current role at SuperCritical Technologies, Davidson is helping to spearhead a cutting-edge technology that uses a thermodynamic power energy conversion cycle for making electricity. The result is a high efficiency, flexible power source.

Prior to 2003, there was little work being done in the field, so Davidson is fortunate to be on the cusp of an emerging and promising technology.

Davidson's education at Oregon State played a significant role in his professional success. He went on to earn two additional degrees elsewhere but circles back to the solid skills he gained at Oregon State. "I still continue to do a lot of engineering in my job, and the education I got at Oregon State was top-notch," he said.

Brandon R. Greenley

B.S. Electrical and Computer
Engineering, 1999
M.S. Electrical and Computer
Engineering, 2001
Manager of New Product
Development, Tektronix
Beaverton, Ore.

Brandon Greenley was a very involved student during his time at Oregon State. While studying electrical engineering, he served as president for the Oregon

State chapter of the Society of Automotive Engineers and president of Eta Kappa Nu, the electrical and computer engineering honor society. As a Multiple Engineering Cooperative Program (MECOP) intern with Tektronix, he was inspired to pursue integrated



circuit design.

"OSU gave me the knowledge, skills, and confidence necessary to be successful in industry," he said.

Greenley is now a product development manager at Tektronix, where he serves as program manager and functional manager for the engineers working on spectrum analyzer products and arbitrary waveform generator products. He led the development for several new products, including the world's first mixed-domain oscilloscope.

His internship experience at MECOP, coupled with the technical knowledge he acquired as a student, prepared Greenley for his career. As a result, he strongly encourages current students to build their networks and develop real-world skills.

"Take advantage of the opportunities to network with industry," he said.

Besides engineering, Greenley enjoys woodworking and spending time with his wife and two young sons.

Joshan W. Rohani

B.S. Civil Engineering, 2006
M.S. Civil Engineering, 2007
Civil/transportation Engineering
Project Manager, David Evans and
Associates Inc.
Portland, Ore.

As a student at Oregon State University, Joshan Rohani leaned on several valuable mentors who helped expand his skill set and launch his career. Now, as a project manager at David Evans and Associates Inc., Rohani is pay-

ing it forward by encouraging, mentoring, and equipping the next generation of leaders. He says that making connections with peers and other professionals can be equally important to learning the fundamentals of engineering.

"I realized that there was life beyond just the technical side of engi-



neering, and really how much more can get done with strong collaboration," said Rohani.

Besides a dedication to mentoring, Rohani has experience with long-range planning, multimodal designs, and traffic engineering. He is licensed as both a professional engineer and professional traffic operations engineer.

During his time with David Evans and Associates, Rohani has taken on leadership and management roles on several regionally significant projects, including the Sellwood Bridge

Replacement, Portland Freeway Bottleneck Relief Program, and Port of Coos Bay Channel Modification Study.

He attributes part of his success to the professors who encouraged him to get a master's degree — role models who also taught him the importance of networking and team building in the workplace and within industry.

"To me, leadership involves setting a path toward success and bringing skilled team members into alignment with your vision," he said.

Kevin S. Stangeland

B.S. Mechanical Engineering, 1998
Director of Engineering for the
Construction & Industrial division,
ESCO Corporation
Portland, Ore.

Kevin Stangeland learned many things as a mechanical engineering student at Oregon State University. But most importantly, he became a better learner. “The program at Oregon State is challenging. It taught me to not give

up, as well as how to learn,” he said.

Understanding how to assimilate new ideas, solve problems, and translate knowledge into action have been vital to Stangeland’s career. These skills have allowed him to work in several different divisions at ESCO Corporation. Headquartered in



Portland, Ore., ESCO is an independent developer and manufacturer of highly engineered wear parts and replacement products used in mining, infrastructure development, oil and gas, and industrial applications around the world.

Currently, he is in charge of six product engineering and two new product development teams for ESCO’s construction and industrial division.

Prior to that, he led the development of the Nemisys Cast Lip Sys-

tem, which won Mining Magazine’s “Most Innovative Product for Surface Mining” award in 2012.

Throughout his career, Stangeland has brought a unique blend of engineering skills, passion, fun, curiosity, and drive toward continuously improving ESCO’s engineering culture.

“I generally like to make things really fun, challenging, and interesting. I have a strong drive for solving problems and making things better,” he said.

Jama D. VanHorne-Sealy

M.S. Radiation Health Physics, 2008
Director, Radiation Safety Division
Assistant Professor, Preventive
Medicine and Biometrics
Uniformed Services University
of the Health Sciences
Radiation Health Advisor,
Office of Health Affairs
Department of Homeland Security
Bethesda, Md.

When Major Jama VanHorne-Sealy was tasked with setting up a radiation detection laboratory for the

armed forces in Japan after the Fukushima disaster, she called upon her education at Oregon State. “Had I not had great training in instrumentation and analytical skills, I wouldn’t have been able to do that. And there was no one nearby to call to help me. I had to tap into my educational experience,” she said.

Besides her work in Japan, Van-



Horne-Sealy is the primary adviser on nuclear and radiation health issues for the Office of Health Affairs and the chief medical officer with the Department of Homeland Security. Concurrently, she directs radiation safety and serves as assistant professor of preventive medicine and biometrics for the Uniformed Services University of the Health Sciences. She developed and implemented the first Radiation Safety Program for U.S. forces in Afghanistan and is a decorated member of the armed forces.

With all her obligations, it’s amaz-

ing that she still has time for family life, but Oregon State helped cultivate her work-life balance skills. Kathryn Higley, the department head of Nuclear Engineering and Radiation Health Physics, was also an important mentor and taught VanHorne-Sealy that she could enjoy family time and still be a good scientist.

“I don’t think I could have chosen a better program. Oregon State allowed me to have a wonderful balance between spending time with my family and getting a great education,” she said.

Wassana Yantasee

M.S. Chemical Engineering, 1999
Ph.D. Chemical Engineering, 2001
M.B.A., 2001
Associate Professor, Department of
Biomedical Engineering,
OHSU School of Medicine
Portland, Ore.

Wassana Yantasee graduated from Chulalongkorn University in Thailand with a B.S. in 1995 and then came to the United States, where she holds three degrees from Oregon State. She earned a Ph.D. and M.B.A. simulta-

neously, doing research by day and business coursework by night.

Even though she grew up in Thailand, Yantasee found Oregon State to be a perfect fit. “Although I was far from home, I felt at home at OSU,” she said. “The university has great student diversity, and I had opportunities to make friends from all over the world.”



After completing her Ph.D. requirements, Yantasee launched a research career. From 2001 to 2009, she worked as a research scientist at the Pacific Northwest National Laboratory. Today, she is an associate professor of biomedical engineering at Oregon Health and Science University School of Medicine, where she researches the development of engineered nanomaterials to diagnose, prevent, or treat diseases. In addition, she is the president of a small biotech company called PDX Pharmaceuticals.

Yantasee is proud to hire fellow

Oregon State graduates, and to be able to contribute to prevention and treatment of deadly diseases such as cancer and toxic metal exposure.

“I’m most proud of being able to give all my Ph.D. students (currently there are four of them) free education from my research grants,” she said. “Also, my small business company, PDX Pharmaceuticals, has received a fast-track Small Business Innovation Research (SBIR) contract award from the National Cancer Institute to develop a new drug that will potentially treat cancer that becomes resistant to the standard-of-care drugs.”

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- » 6,758 students
- » More than 34,000 degrees awarded
- » Highest earners among other college-educated Oregonians
- » 12,759 alumni in Oregon, generating about \$1 billion in personal income

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