



EMERGING LEADER

Shaila Murty

INTEL CORPORATION

For pioneering complex, cutting-edge manufacturing automation and security solutions, and for team leadership that inspires trust, engagement, and a shared vision among diverse stakeholders.

Shaila Murty is a technical program manager with Intel Corporation's IT enterprise applications and strategy group. She specializes in manufacturing automation innovations, manages a global human capital management architecture team, and delivers cloud-based "software as a service" solutions that impact 100,000 Intel employees worldwide. She joined Intel in 2005 as an integration technologist in the technology manufacturing group.

One of Murty's most significant contributions was made on her first major project at Intel: high-bandwidth digital content protection (HDCP), a technology developed by Intel that protects digital entertainment content. This involved key provisioning, the process of embedding secure and unique keys (patterns of ones and zeroes) directly into silicon during manufacturing. Key provisioning presented significant automation challenges: scalable and mission-critical infrastructure, security to meet legal and

contractual obligations, and 100 percent key integrity.

The project was a success, both in terms of its innovative technology, and because it enabled a foundation for every future Intel product that fuses security keys. The solution is now incorporated into all Intel products and all global assembly test manufacturing (ATM) factories for manufacturing in high-volume.

Another breakthrough program that Murty managed was automation for an assembly test manufacturing binning — the process of segregating units into categories based on power and performance. This methodology provides faster customer response and significant cost savings. Murty conceived a software-based controller at a virtual operation, where highly complex binning calculations are run offline on a compute-intensive server.

Murty has five technical publications and has received numerous awards throughout her career, including: the

Intel Quality Award, the Intel Malaysia Premier Site Recognition Award, six Divisional Recognition Awards from various Intel business groups, and an Engineering Emmy (awarded to Intel for HDCP).

Balancing the demands of her career with community service, Murty has coordinated children's classes on Sanskrit and Indian philosophy and volunteers for Kannada Sangha of Arizona, a cultural nonprofit organization. Within Intel she mentors women engineers, and outside Intel, represents the company at events such as the Arizona State University Women Who Code event and the Grace Hopper Celebration of Women in Computing.

Murty holds bachelor's and master's engineering degrees in computer science from Bangalore University and Arizona State University. She is married with two children and lives with her family in Phoenix. In her spare time, she enjoys being with her family, running half marathons, watching movies, and traveling.



EMERGING LEADER

Jessica Snyder

THE DOW CHEMICAL COMPANY

For disciplined and tenacious commitment to manufacturing and process improvement, for constructive and collaborative team leadership, and for key support of SWE initiatives.

Jessica Snyder is the global external manufacturing (EM) leader for The Dow Chemical Company's oil, gas, and mining business. In this role, she is responsible for the creation and execution of a global business strategy that has enabled the business to maximize value through an appropriate mix of internal and external manufacturing. Additionally, she oversees technology transfer and safe implementation of Dow products at contract manufacturers. Since Snyder joined the Rohm and Haas Company (acquired by Dow in 2009) in 2001, she has held a variety of positions in engineering, pilot plant operations, and project management. She developed new emulsion polymers for coatings and adhesives and was selected to join the technical team for a start-up business in digital imaging. Given her own laboratory and pilot scale media mill, Snyder was assigned to determine the best media for grinding pigment-based dispersions for inkjet inks. This two-year project required international cooperation and travel, and Snyder's technical leadership resulted in the company's capital investment of a new media mill for full-scale production.

In 2009, Snyder took a role as pilot plant group leader, overseeing new product scale-ups, batch scheduling, inventory management, small project work, and safety and environmental compliance. Under her leadership, the pilot plant produced more than 300 batches per year of 30 different products without injury or release to the environment.

Snyder joined the EM group in 2011 as a project manager, leading implementation of new EM projects for several Dow business partners, often managing six to eight projects simultaneously. Within six months, she was promoted to global EM leader. During her tenure in EM, Snyder has managed significant improvements to the organization as a whole. In 2012, she led a Six Sigma project to cut EM project cycle time. She engaged others to brainstorm possible root causes for delays, validated these root causes, and then made suggestions for improvements, distilling the ideas into four recommendations. In one year, the EM project cycle time was reduced by 13 percent.

A strong advocate for science, technology, engineering, and mathematics (STEM), Snyder is an active member of

the Society of Women Engineers' Philadelphia Section and has served as vice president of professional development and treasurer. She has presented five times at the SWE annual conference and has led workshops for Dow's Women's Innovation Network (WIN). Snyder has organized an annual joint SWE/WIN professional development meeting for seven years. She is an active Dow STEM ambassador, leading science demonstrations at schools and universities.

Snyder earned a bachelor's degree in chemical engineering, with a minor in German, from Lafayette College in Easton, Pennsylvania, and a master's in polymer science and engineering from Lehigh University in Bethlehem, Pennsylvania. Additionally, she is Six Sigma, Green Belt certified. Snyder is married to her high school sweetheart, Nathan, and they have two daughters, Gretchen, 7, and Claire, 5. She enjoys coaching her daughter's soccer and softball teams, volunteering with the children's ministry at her church, and officiating volleyball for local high schools.



SWE DISTINGUISHED NEW ENGINEER

Michelle C. Andersen

SIKORSKY AIRCRAFT CORP.

For broad technical expertise that provides a unique perspective to regulatory compliance, and for enthusiastic commitment to SWE and the advancement of women engineers.

Michelle C. Andersen is a research and engineering technology manager with Sikorsky Aircraft Corp., where she represents engineering in a company-wide international trade compliance organization. She is currently leading the company's effort to integrate compliance processes into its engineering processes, and is responsible for training 4,000 engineers to better understand complex government and trade regulations.

After graduating from Smith College with a B.S. in mechanical engineering and completing several internships, she joined Sikorsky in 2005 as a materials and process engineer, supporting development of a new aerospace-grade titanium alloy. In this role, Andersen was mentored by several premier metallurgists, gaining valuable applied knowledge of raw material production processes, component design, and manufacture for a helicopter's most critical dynamic components.

She dove into the breadth of knowledge and skills of Sikorsky's diverse engineering work force, enjoying its range of assignments and intense atmosphere. As a result of her drive and performance, she was promoted to metals lead for the company's rotor blades product center in 2009, leading her team in delivering one

project eight months ahead of schedule, and another, where she increased process yield on production of a component by 60 percent — all while studying for a master's in organizational leadership.

Andersen's introduction to the Society of Women Engineers in 2002 as an undergraduate at Smith College was the catalyst for 13 years of increasing dedication to future generations of engineers. Inspired by SWE's K-12 outreach, she formed a partnership between Smith College engineering students and the SWE Hartford Section, which led to Andersen's co-forming a SWE section at Smith. Under her leadership, her section hosted the Region F conference on the Smith campus. After graduation, Andersen became the Hartford Section president and developed a workshop series on resume writing and career navigation, a valuable resource during the economic downturn of 2010.

On the region level, Andersen held the positions of collegiate membership coordinator and region secretary. Her Society-level experience includes the membership and outreach committees, and working on "Wow! That's Engineering!®" and "Invent It. Build It." events.

Most of Andersen's free time is devoted to giving back to her community. Through

her influence as a board member of Sikorsky's Professional Development Network, she has raised company participation in Habitat for Humanity, Connecticut House of Heroes, Special Olympics Connecticut, and the American Heart Association. She is also a board member for a gratitude-based nonprofit, Look for the Good Project, which raises awareness about the positive effects of gratitude and develops educational programming to prevent bullying and suicide. Her leadership of a Sikorsky employee-designed obstacle for a "Down and Dirty 5K" obstacle course event contributed to raising more than \$40,000 for Sterling House, a family services and community center in Stratford, Connecticut.

Andersen earned a B.S. in engineering from Smith College, an M.S. in engineering from Purdue University, and an M.A. in organizational leadership from the Lender School of Business at Quinnipiac University. She is a member of ASM International, the Materials Information Society and the Society for International Affairs. Outside of work, she sings in a competitive Sweet Adelines International barbershop chorus and enjoys spending time with her husband, Mark, an engineer, drummer, and advocate for women in engineering and in the workplace.



SWE DISTINGUISHED NEW ENGINEER

Ester Barbuto

BOOZ ALLEN HAMILTON

For leveraging diverse industry experience and a passion for problem solving to effect change in her profession, in SWE, and in the community.

Ester Barbuto is a first-year, full-time MBA candidate at the University of Virginia's Darden School of Business. Her focus is on technology product management for wearables and augmented reality, as well as venture capital, investing in technology.

She is on educational leave of absence from Booz Allen Hamilton's Strategic Innovation Group in Washington, D.C., where as an associate she advocated innovative problem solving and human-centric design. Her focus was bringing analytical technique to "crowd science," to help clients solve challenges at minimal cost via digital platforms.

After graduating from Carnegie Mellon University in 2008 with a B.S. in chemical engineering, Barbuto joined Goldman Sachs in New York City as a market risk analyst for hedge funds within the Investment Management Division. In 2010, she launched a departmentwide networking initiative to encourage interaction between 200 members of global teams, finding her true passion for solving problems and connecting people.

In 2012, Barbuto joined Booz Allen Hamilton as a senior consultant. Just three months later, she received the company's High Five Award for system analysis and development of an interactive dashboard for the Aegis Combat System

for the Naval Sea Systems Command. Barbuto then transferred to the West Coast, where she assisted the Space and Naval Warfare Systems Command Headquarters in assessing the need for information technology architecture development, effectively delivering solutions in a client space typically resistant to change.

In 2013, Barbuto was chosen to define the strategy for the firm's Building a Culture of Innovation initiative. This was a select group charged with designing new methods of collaboration, education, and problem deconstruction. Later that year, she relocated to Washington, D.C., as one of 20 in the Consulting Residency Program at Booz Allen, a program of three six-week rotations with clients across the space and health care industries, further developing her talent for strategic thinking, data analysis, and her growing capacity to drive change.

Barbuto was Booz Allen Hamilton's SWE regional ambassador and served as conference communications lead for WE12 and WE13. She was also actively involved in the GLOBE LGBT Forum, and received a Booz Allen Excellence Award for community outreach in 2013.

After joining SWE in 2005, Barbuto soon advanced to collegiate section president and organized numerous collegiate section events, recognized with

an Outstanding Collegiate Section Award in 2008. Transitioning to the New York Section, Barbuto served as region representative in 2010 and 2011. While living in Virginia in 2012, she was elected president to reinvigorate the Hampton Roads Section, which experienced growth of more than 30 percent in that year.

At the Society level, Barbuto served on the finance, audit, and collegiate leadership coaching committees and was elected to the board of trustees in 2013. In 2014, she published the first board of trustees stakeholder briefing. Barbuto was also a driving force behind the #SWEScholar "selfie" campaign to track the stories of SWE scholarship recipients.

She has combined her passions for cycling and philanthropy, completing a 110-mile cycling event in Tucson that raised more than \$5,000 for those with blood cancers. She continued these efforts in 2013 and completed the San Diego Triathlon Challenge, raising over \$3,500 for the Challenged Athlete's Foundation. In 2015, Barbuto raised funds for and completed the 110-mile Face of America Ride to benefit World T.E.A.M. Sports, which supports wounded warriors and challenged athletes.

She enjoys traveling, baking French pastries, and spending time with her dogs, Oscar and Chloe.



SWE DISTINGUISHED NEW ENGINEER

Dana Day

THE BOEING COMPANY

For cross-functional communication that achieves elegant solutions to complex problems, and for dedication to helping build young girls into strong, capable women.

Dana Day is a primary flight controls engineer supporting the 737 Next Generation airplane program at The Boeing Company in Renton, Washington. She provides analysis and engineering solutions for airplane production and fleet issues to various stakeholders, including airline customers, external suppliers, and Boeing manufacturing.

With additional responsibilities as a delegated design engineer and a design approval engineer, Day assists with maintaining airplane certification and having cross-functional design authority. These unique capabilities require ongoing training to improve team efficiency for design releases.

She graduated from Pennsylvania State University in 2008 with a B.S. in aerospace engineering. As a Boeing intern that summer, Day worked on her first airplane, the C-17 Globemaster III military transport program in Long Beach, California, helping develop strategies for reviewing and solving issues with electrical and mechanical components.

Day accepted a full-time position with Boeing in 2009 as a product review engineer supporting the 747-8 Freighter and Intercontinental airplanes through wing to stub, wing to body, and final body joins

during factory production. She provided technical solutions for nonconforming issues through the build process, making sound engineering decisions in a fast-paced, high-stress environment.

An energetic SWE member since 2004, Day was most recently the FY15 outreach committee chair, focusing on strengthening external partnerships and improving communication with members. Day also helped to launch an outreach metric tool, parent and educator training videos, a monthly Web series, and SWENext, a program serving middle- and high-school girls during her term. Day has volunteered at and attended numerous SWE conferences, served as SWE Boeing recruiter, and coordinated volunteers for the “Invent it. Build it.” outreach.

As the FY12 president of the Pacific Northwest Section, Day worked to create a more inclusive environment by opening executive council meetings to all members, increasing the section’s social media impact. Most notably, Day reinvigorated her section’s relationship with the Girl Scouts by launching a SWE/Girl Scout “Explore Engineering” workshop that continues to host large groups of scouts each year. She also has served as Region J lieutenant governor, the regional membership committee chair, and section representative,

in addition to serving on a variety of committees and work groups. During a period of unprecedented section growth last year, she spearheaded a “SWE Buddy” campaign where experienced section members volunteered to contact new members to make personal, welcoming connections.

In her community, Day participates in school outreach events through Washington Mathematics, Engineering, and Science Achievement and the Washington Alliance for Better Schools. She routinely works with her former high school physics teacher on science, technology, engineering, and mathematics classroom projects.

Day has been a volunteer coach for the Girls on the Run of Puget Sound since 2013 and became a lead coach last year. Girls on the Run offers grade-school girls a 20-lesson curriculum that combines training for a 5K running event with lessons that inspire girls to become independent thinkers and make healthy decisions.

In 2014, Day earned a certificate in systems engineering fundamentals from the California Institute of Technology. Day and her husband, Benjamin, welcomed their first child last summer and are already reading her *Calculus for Infants* nightly. She looks forward to teaching her daughter the joys of volunteering and community involvement.



SWE DISTINGUISHED NEW ENGINEER

Brittney Elko

GENENTECH

For outstanding technical performance and leadership in a wide range of roles and for exhibiting consistent drive and dedication on behalf of SWE.

Brittney Elko is a clinical demand and supply leader in the Pharma Technical Development-Planning organization at Genentech, where she serves as primary liaison between the technical development, clinical operations, and product strategy teams, charged with creating successful clinical supply strategies, and accurate demand forecasts and plans for clinical trial production in the biotechnology space.

After earning her B.S. in engineering from Trinity University in 2008, Elko joined The Clorox Company as a product and process development engineer. Her creative solutions and leadership resulted in the successful launch of five new Pine-Sol® products.

In her next role, Elko led the formulation of a new stain remover, researching a hard-to-remove stain's chemistry, developing test methods, and creating a synthetic stain for use in future laundry product testing. She also received the top-tier award in Clorox's annual New Product Idea Competition, by conceptualizing a new product, developing a financial business case, and leading a subteam that resulted in a project charter.

Promoted to senior supply chain leader,

Elko provided end-to-end supply chain expertise and leadership to help plan and execute comprehensive product change initiatives that resulted in proof of manufacturability for nine new products in the disinfecting wipes space.

As the supply chain leader on Food and Drug Administration business initiatives/projects, Elko identified due diligence and ensured adequate supply chain plans for a game-changer project with multimillion-dollar potential in the skin-antiseptic space.

Throughout her college and working life, Elko has shown both respect for SWE's rich history and a drive to help the Society evolve with the times. One of a handful of collegians on the governance task force, she helped research and recommend changes to the council of representatives structure, resulting in its current senate configuration. In FY09, she became the collegiate representative on the board of directors, and her performance in this role led to its establishment as a permanent position in FY11.

As senator, Elko helped shape the newly formed senate and led strategic think tanks on the mega issues committee. She helped increase value to unemployed

members and prepare women for the skill sets needed in 2020. Later, as committee chair, her work resulted in a team of senators that created the Society's first e-book.

As speaker of the senate on the board of directors, Elko became a motivator and strong leader. During her tenure, the senate advanced several special projects, such as the Diversity and Inclusion Knowledge Cards, SWE's new logo proposal and messaging, and the effort to transform Society structure as it grows globally. She has been involved in creating the new international SWE Affiliates and Ambassadors programs, SWENext, and the rollout of the Employer-Sponsored Dues Program.

Elko has mentored students and teachers alike and energetically volunteers at a local charter school. She is active in Tech-bridge, which helps girls in underserved communities discover science, technology, engineering, and mathematics (STEM) through hands-on learning and real-world exposure, and Expanding Your Horizons, an annual STEM-based conference for middle-school girls.

In her spare time, Elko enjoys wine tasting, golfing with her husband, crafting items for the house, and watching football on Sundays.



SWE DISTINGUISHED NEW ENGINEER

Susie Martinez Kirkland

GENERAL ATOMICS AERONAUTICAL SYSTEMS INC.

For technical excellence and career-shaping interpersonal skills, and for leveraging those skills as a role model in support of SWE and the community.

Susie Martinez Kirkland is a systems test and qualification engineer at General Atomics Aeronautical Systems Inc. (GA-ASI) in San Diego, where she works on remotely piloted aircraft (RPA) systems for the U.S. Air Force (USAF). In her time at GA-ASI, Kirkland has led the test effort for the Internet protocol (IP) migration development program in support of the UAS remote split operations. She also drafted and coordinated an acceptance test plan to facilitate transfer of hardware to the customer that led to a multimillion-dollar production contract.

A USAF test director, Kirkland is qualified to conduct UAS flight tests. Currently, she is leading the planning for an upcoming USAF test effort. Kirkland's ease of communication and extensive knowledge of test planning in all aspects of high-dollar contract programs have been instrumental to the company's success.

Prior to working for General Atomics, Kirkland lived in Scottsdale, Arizona. She initially worked as a digital design engineer, creating, integrating, programming, and testing designs for Xilinx and Altera field programmable gate arrays (FPGAs). These were used in software-defined radio

applications for the Joint Tactical Radio System (JTRS) Handheld Manpack Small Form Fit (HMS) Radio and the Wideband CDMA-based Mobile User Objective System (MUOS) User End program.

After developing credibility as a design engineer, Kirkland accepted a deputy software lead position in an integration lab on-site. In that role, she led a team of software developers and worked with a cross-functional team of test engineers, systems engineers, program managers, and software and hardware engineers to meet integration deadlines.

Kirkland joined the Society of Women Engineers in 2001 and has been a SWE collegiate leadership coach since 2006, showing unique talent for mentoring and coaching hundreds of collegiate members throughout Region B. Her current and past SWE involvements include director of the San Diego County Section collegiate outreach committee, San Diego State University Collegiate Section counselor, FY10 Phoenix Section vice president, and FY08 Region B secretary. Kirkland has also chaired two successful Region B conferences.

She was the co-initiator of establish-

ing a partnership between the Society of Women Engineers and General Atomics, which included the creation of a corporate-wide women's group and, more recently, recruitment at WE14, coordinating and advocating with General Atomics executive leadership, garnering participation and support, and leading meetings for the first two years.

Kirkland is a 14-year member of Upsilon Kappa Delta Multicultural Sorority. In 2012, she received the sorority's Alumni of the Year award. Since college, she has volunteered for and supported organizations for people with disabilities, such as San Diego Parks and Recreation Therapeutic Recreation Services and the Special Olympics.

The first engineer in her immediate family, Kirkland earned a B.S. in electrical engineering from San Diego State University in 2005. In 2013, she became a mother and proudly met her one-year goal of breastfeeding while also making several significant contributions to her company. In her free time, Kirkland enjoys spending time with her husband, family, and friends.



SWE DISTINGUISHED NEW ENGINEER

Kalyani Mallela

PHILIPS HEALTHCARE

For technical expertise; highly effective, cross-organizational collaboration; and for being a champion of STEM in her workplace and through SWE.

Kalyani Mallela recently joined Philips Healthcare as a senior systems engineer working on development of external defibrillators. Prior to that she was a systems engineer manager at Starkey Hearing Technologies in Eden Prairie, Minnesota. Joining the company in 2010, Mallela quickly earned the position of first technical lead for the biggest program in the company's history. Her performance was such that she became a role model and mentor for subsequent technical leads.

Mallela managed nine engineers who were developing and launching innovative technology for hearing aids, fitting software, accessory devices, and mobile applications. Her team participated in research and technology projects and product development along with providing technical support to customer service. Mallela is recognized for her leadership and relentless efforts in meeting customer needs.

Prior to Starkey, Mallela worked for Transoma Medical as a software engineer on the embedded system modules for Sleuth, an implantable cardiac monitoring system, and for Boston Scientific as a systems engineer for design analysis

and validation of LATITUDE™, a patient management system for monitoring cardiac defibrillation and resynchronization.

Mallela joined the Society of Women Engineers in 2008 and has become increasingly involved with the Minnesota Section. She has held various leadership roles, including outreach co-chair, fund development co-chair, section representative, vice president, and president. She has been honored with the Most Dedicated Member, Bravest Volunteer, and Key Contributor awards. She has been involved at the region level and served as Region H senator. She is very active at the Society level through her involvement in its outreach, scholarship, awards and recognition, and multicultural committees. Mallela was also the awards and recognition committee chair-elect and chair for FY12-13.

She volunteers in her community for Vibha, an organization dedicated to creating a brighter future for underprivileged children in India, and the India Association of Minnesota, a nonprofit organization for building a strong and cohesive community of Asian Indians in the state. She currently serves as vice president of awards at the Minnesota

Federation of Engineering, Science, and Technology Societies.

Dedicated to outreach, Mallela has been instrumental in communicating to more than 2,000 schoolchildren each year through classroom visits, hands-on activities, mentoring, and sharing her experiences as an engineering student and professional. She inspires girls toward technical opportunities by serving as a role model.

In 2014, Mallela was recognized by SWE as one of the five New Faces of Engineering candidates. The same year, she was named top New Faces of Engineering candidate by DiscoverE and was featured in national media and in a satellite media tour. She was recently profiled on www.BeAnEngineer.com, www.ladyparagons.com, and www.engineergirl.org

Mallela holds M.S. degrees in management of technology and electrical engineering, both from the University of Minnesota Twin Cities, and a B.E. in electronics and communications from Osmania University in India. She enjoys travel, cooking, playing board games, and spending time with her husband, Vijay.



SWE DISTINGUISHED NEW ENGINEER

Rachel Diane Morford

THE AEROSPACE CORPORATION

For rapid advancement in the field of aerospace, and for ever-increasing leadership and impact on the future leaders of the Society of Women Engineers.

Rachel Diane Morford knew from a young age that she wanted to work in space, after family camping trips spent watching the night skies. Her love of math and science drew her to a career in STEM, a passion she tries to impart through her dedication to outreach programs.

In less than seven years with The Aerospace Corporation, Morford has been promoted three times, consistently moving into assignments of increasing responsibility. Now a project leader, focused on integration and test efforts for space, ground, and launch systems, she is responsible for evaluating technical data, including requirements verification, system design and integration processes, and test planning and execution for a variety of programs and customers. As a department leader, she mentors and provides guidance to other engineers. Prior to this role, Morford worked as a mission engineer in the Launch Directorate, where she ensured the successful integration and launch of a national security space system. She also worked for the Launch Directorate chief engineer, evaluating hardware and system anomalies, recommending

system risk mitigation with a focus on assuring mission success for nine successful launches. As a result, Morford was recognized with the company's Aerospace Team Achievement Award.

Morford is committed to supporting diversity at The Aerospace Corporation, where she is a member of the Excellence in Diversity Award selection committee, an active participant on the Aerospace diversity action committee, and has served twice as president of the Aerospace women's committee. She also was chosen as the company's representative to the New Generation Emerging Leader program, a prestigious appointment in the aerospace industry.

An active member of the Society of Women Engineers since her first year of college, Morford served in several leadership roles while a student, including as a member of the collegiate interests committee. After graduation, she transitioned to professional membership in the Los Angeles Section and immediately became involved in leadership roles at the section and region levels, as well as continuing her involvement in Society committees. She has served as the Los Angeles Section

president, collegiate leadership coaching committee chair, and is currently the Region B governor. Beyond her support of women in engineering, Morford encourages future engineers through her support of science competitions such as the California State Science Fair. Once a participant in grade school, she now gives back to the program as a judge.

Morford graduated from the University of Southern California with a B.S. and M.S. in electrical engineering and holds a certificate in technical management.

She continues to support the USC community as well as her local community. She frequently returns to USC to speak on technical and leadership topics and has served as a mentor for several students. Morford enjoys outreach opportunities to encourage students to pursue careers in STEM and regularly speaks to K-12 and community college students about opportunities in these fields.

In 2013, Morford received SWE's New Faces in Engineering award. In her free time, she enjoys running half marathons, refinishing old furniture, and travel.



SWE DISTINGUISHED NEW ENGINEER

Shelley Stracener

HEADS UP TECHNOLOGIES INC.

For technical expertise and versatility across industries, and for leveraging knowledge, talent, and enthusiasm for the benefit of SWE and the community.

An engineering program manager for Heads Up Technologies Inc., Shelley Stracener's background is in system and product design, hardware development, firmware development, product and system verification/validation, and regulatory certification. She spent several years at Dell Inc. as a sustaining engineer and, later, a design engineer for a server storage enclosure team. During the transition of storage technology from small computer system interface (SCSI) to serial advanced technology attachment/serial attached SCSI (SATA/SAS), and hard disk drives to solid state drives, Stracener developed enclosure architectures and printed circuit board component designs that were used in some of the first highly scalable cloud storage data centers.

After joining Heads Up Technologies in 2010, Stracener immediately distinguished herself through contributions to the design and development of its next-generation LED lighting systems for business jet aircraft. She also managed all Federal Aviation Administration (FAA)-required highly accelerated life test (HALT) and Radio Technical Commission for Aeronautics DO-160 environmental qualification testing for nearly 20 different components. This successful program resulted in the award of four models of Cessna business jets, including

the Citation X+, Sovereign+, Latitude, and Longitude aircraft.

Stracener also made significant technical and leadership contributions to another major program, Heads Up's Lumin® Cabin Management System, which controls all in-flight entertainment and cabin functions, such as lighting, heating, cooling, and galley/lavatory equipment. Again, she proved to be a self-motivated, highly competent engineer with strong managerial skills by not only completing her technical electrical/firmware designs, but also managing FAA-required HALT and DO-160 testing. The system has been selected for six new aircraft production programs and is currently flying on four different aircraft models.

Stracener's excellent performance resulted in her promotion to engineering program manager, where she continues her electrical/firmware design functions, but also is responsible for coordinating Heads Up and customer engineering and program activities.

She joined SWE as an undergraduate in 2002 and has contributed her time, talent, and enthusiasm to the organization ever since. As the Region C webmaster, Stracener upgraded all of the region platforms used to connect with members. She overhauled the region's website and created its professional blog, which has

become a platform for region leadership to quickly distribute information to all members. She also manages Region C's Facebook page and Twitter account and has been instrumental in extending the region's reach in the social media realm. Stracener also served as webmaster for the Southwest Texas and Dallas sections.

Throughout her SWE career, Stracener has shown enthusiasm for mentoring others, working with students through various outreach activities, including job shadowing and Design Your World – STEM conferences. She tirelessly mentors SWE sections and webmasters to implement the same improvements that she created for Region C, and last year, was nominated for Region C's Emerging Leader Award.

Stracener graduated with a B.S. in electrical engineering from Baylor University in 2005. She is a member of IEEE and Eta Kappa Nu, the international electrical and computer engineering honor society of IEEE. An avid recumbent cyclist and advocate for bicycle safety, Stracener has completed 10 MS150 events, a two-day, 150-mile race that benefits the National Multiple Sclerosis Society.

Away from work, Stracener enjoys spending time with her husband and two dogs.



SWE DISTINGUISHED NEW ENGINEER

Victoria Borchers Tinsley

TOTAL PETROCHEMICALS AND REFINING USA INC.

For technical excellence that improves product quality and performance, lowers costs, and increases safety, and for exemplifying SWE's mentoring mission, at the collegiate, regional, and Society levels, and in her community.

Victoria Borchers Tinsley is a senior technical service engineer with the Polymers Americas Group of Total Petrochemicals and Refining USA Inc. (TPRI). Tinsley provides technical expertise and leads troubleshooting efforts for customers who use TPRI's polymer products in film and fiber applications.

She graduated from Texas A&M University in 2005 with a B.S. in chemical engineering. Her career began at Eastman Chemical Co. in Longview, Texas, as a process improvement engineer, where she led numerous process optimization projects that resulted in improved product quality and significant cost savings. Quickly recognized for her excellent leadership abilities, organizational skills, and commitment to safety, Tinsley was promoted to technical staff engineer in 2008, responsible for capital projects ranging from \$250,000 to \$2 million. Tinsley was also a founding member of Eastman's Professional Development Club and served on the site training coordination team, overseeing the development of training courses for recently hired chemists and engineers.

In August 2008, Tinsley joined TPRI as a senior process engineer at its Bayport high-density polyethylene plant in

Houston, where she supported the plant's day-to-day operation, by monitoring product quality, troubleshooting equipment and processes, and coordinating incoming raw materials supply. In 2010, she moved into TPRI's Polymer Technical Service Group, supporting polymer applications from injection molding to blown film to fiber spinning. Her customers range from family-owned businesses to Fortune 500 companies, and her work benefits plastic products that millions use daily, from child car seats to food and medical packaging.

Tinsley joined the Society of Women Engineers in 2001 while at Texas A&M and held several section leadership positions. She also organized ongoing community service activities for the A&M section, such as its participation in the Relay for Life. After graduating, she continued to be an active leader in SWE, serving as the Region C members at large (MAL) representative to the council of representatives for multiple years, a judge for Society award submissions, the LeTourneau University SWE counselor for two years, and as a judge for SWE scholarships, where she helped distribute more than 230 scholarships valued in excess of \$700,000.

She is currently the Region C treasurer,

the Region C MAL representative to the MAL and Region C councils, the MAL outreach coordinator, and the Region C representative on the Society outreach committee. She has been a member of the American Institute of Chemical Engineers (AIChE) since college, and after graduating, she participated on AIChE's young professionals advisory board.

In her community, Tinsley is a dedicated mentor with Females Leading Aggies as Mentors in Engineering, MentorNet, and most recently with Dress for Success Houston Women2Women. For the past seven years, she has been a volunteer and event coordinator with the Caring Aggies Mentoring Program, Houston A&M Club's long-term outreach program. She also volunteers with Junior Achievement, Habitat for Humanity, and DePelchin Children's Center.

Tinsley plays violin with the Baytown Symphony Orchestra and enjoys traveling, taking dance lessons, painting with watercolors, and reading great books. She married in 2014, and looks forward to many new adventures with her husband, Gavan.



SWE DISTINGUISHED NEW ENGINEER

Kate Van Dellen

CONSULTANT

For a string of company firsts in aircraft systems testing and qualification, and for passionate dedication to the mission of SWE through a history of volunteerism.

Kate Van Dellen recently changed careers and is a writer, blogger, and public speaker whose work focuses on gender equality and authentic living. Prior to this, she was an urgent field support engineer with General Atomics Aeronautics. An early love of aviation inspired by her father, a private pilot, has informed her career and life, giving her unique insights and abilities as an engineer communicating with pilots in critical situations.

After graduating in 2008 from California Polytechnic State University, San Luis Obispo with a B.S. in aerospace engineering, Van Dellen landed in a leadership program at Textron, where she helped develop an intellectual property protection process for Bell Helicopter's patent committee. While at Cessna Aircraft, a Textron company, she chaired the Organization of New Cessna Employees (ONCE), where she assisted transitioning employees during a challenging reorganization.

After joining General Atomics in 2010, Van Dellen began bridging the engineering and flight test center communities and fostering a new era of cooperation within

the company. She was the first systems test engineer approved to be a test conductor for one of the Army programs. Within four years, she was the only systems test engineer approved to test on all three U.S. Army platforms.

Van Dellen's ability to communicate with flight crew, manage differing troubleshooting opinions, and document events, has brought aircraft back safely more than once. She was the company's only systems test engineer to be a successful test conductor instructor. After becoming a lead test engineer, she was the first to be added to many company approval lists for manuals and documentation.

General Atomics selected Van Dellen as one of 10 emerging leaders in 2014. As a field support engineer, she was the only woman in her group to have served on call, 24 hours a day, to respond to mishaps and anomalies, a responsibility previously held only by the vice president of engineering.

A SWE volunteer in numerous capacities, Van Dellen served seven years on the Society membership committee, helping it transition from tactical to strategic func-

tions. She helped create the collegiate to career membership category. As one of the youngest membership committee chairs, Van Dellen oversaw the largest growth in SWE membership in FY14.

Also an influencer at General Atomics, Van Dellen started its first affinity group with another SWE member. The two brought key leaders to SWE San Diego County events and started the Women's Internal Network at GA, which has led to multiple professional development events.

She was a 2008 SWE Outstanding Collegiate Member and a 2006 SWE Future Leader. She holds a B.S. in aerospace engineering from California Polytechnic State University, San Luis Obispo and an M.S. in engineering management from Kettering University.

A licensed private pilot since 2003, Van Dellen took her first flight lessons at the age of 13. She and her husband recently relocated to Arlington, Texas. They enjoy travel, including flying their personal airplane. She enjoys gardening, tutoring, fine teas, and "snail mailing" handwritten letters.



FELLOW GRADE

Margo Bubb

CATERPILLAR INC.

For excelling in both technical knowledge and “people” skills to ensure that other women engineers advance, and for long-term dedication to expanding SWE’s message throughout the industry.

Margo Bubb’s long career with Caterpillar and her latest entrepreneurial ventures as a bakery and bed-and-breakfast owner reflect her tremendous drive, energy, and commitment to diversity in the workplace and to women’s accomplishments in engineering and in pursuing their passions.

Bubb holds a B.S. in engineering mechanics and materials from Southern Illinois University and associate degrees in pre-engineering and machine design technology from Spoon River College.

While Bubb was a student at Spoon River College, studying machine design technology, a mentor and her physics instructor suggested that she pursue engineering. Bubb listened and started a pre-engineering degree at Spoon River before transferring to Southern Illinois University. It was at Southern Illinois that Bubb’s affiliation with the Society of Women Engineers began. An active participant in section activities, she performed section clerical work such as completing reports for headquarters and serving in several positions, including section treasurer. Bubb began her student

outreach during this time, participating as a volunteer for the Women in Engineering summer program for minority high school girls.

She joined Caterpillar Inc. in 1989 as a college graduate trainee. Bubb and her colleagues formed a women’s networking group to support one another. After realizing that several of the women engineers had graduated from colleges with strong SWE student section experience, the networking group’s members decided there might be enough interested women to form a professional SWE section in Central Illinois.

Bubb became the driver of starting the Central Illinois Section. She negotiated the geographical boundaries of the new section with the Chicago Regional and St. Louis sections. The new SWE section was officially chartered in June 1992 to start in FY93. Bubb became the charter year president and served in that capacity for two terms, as well as stints as director, database manager, and newsletter editor. She facilitated SWE-led experiments such as simple machines and materials for Engineers Week, as it was called at

the time, and coordinated the Shadow an Engineer program. Bubb also was active in reaching out to women of color about engineering as a profession.

After moving to Missouri in 2000, Bubb stayed active with SWE, this time with the Region i Mid-Missouri Section. She transferred back to the Peoria area in 2007 and rejoined the Central Illinois Section. In 2010, she coordinated the section’s oral history videotaping for SWE’s 60th anniversary.

As the engineering manager for one of Caterpillar’s small focus facilities in Missouri, Bubb managed the technical staff at the rubber and plastic molding facility and served on the facility management team. Currently, she works in the procurement excellence area of the Global Supply Network Division, supporting supplier education and access to information through the supplier connect portal.

In 2011, Bubb and her sister opened a small business, Bubb Girls Inc., out of her rural home in Ipava, Illinois. The business includes ME & EM Bakery & Catering and the Forget-Me-Not Inn Bed & Breakfast.



FELLOW GRADE

Stacey DelVecchio

CATERPILLAR INC.

For exemplary service to SWE and demonstrating the value of diversity in the workplace and in her community while succeeding as an accomplished technical professional.

Stacey DelVecchio is the additive manufacturing product manager in the Analytics and Innovation Division of Caterpillar Inc., leveraging the technology in all spaces, including new product introduction, supply chain, and operations. In her more than 26 years with Caterpillar, she has worked in multiple areas of the company, most recently in the engineering talent area leading an engineering pipeline transformation project.

A life member of the Society of Women Engineers, DelVecchio was the organization's FY14 president. Her vast SWE experience includes the Corporate Partnership Council, strategic planning committee chair, conference programming board, awards committee, and Society treasurer, among myriad other roles and activities. DelVecchio's affiliation with SWE began in 1994 when she joined the Central Illinois Section, where she rotated through most of the offices, including three separate terms as section president.

DelVecchio has also been a member of the government relations and public policy committee and participated in Capitol Hill Day: Diversity and Inclusion Fuels Innovation in STEM, SWE's annual congressional outreach.

She spent the first 16 years of her career working as an engineer and team leader, first at Ashland Chemical Co. and then at Caterpillar. At Caterpillar, she worked

on process development for rubber and plastic components used on Cat® equipment and in manufacturing support for process fluids, water and paint, as well as design, build, and start-up of a greenfield facility in China.

DelVecchio spent four years as an engineering manager in the area of rubber technology and hose and couplings. While in this role, she served one of her terms as the Central Illinois SWE president when Caterpillar joined the SWE Corporate Partnership Council.

Her reputation at Caterpillar both as an engineering leader and as an advocate for women engineers enabled DelVecchio to secure a special assignment during her time as SWE president-elect/president in 2013-2014: to create and implement an engineering talent strategy worldwide. She created a strategy including SWE, the National Society of Black Engineers, and the Society of Hispanic Professional Engineers that incorporated diversity metrics for engineering talent that measured the number of promotions going to women engineers as well as the percentage of female engineers being hired. These types of metrics were previously monitored at a division level, but DelVecchio brought them to a functional group level, including engineering.

She wrote a monthly blog, "Inside SWE with Stacey D," aimed at sharing what she was learning about diversity; spoke with

each diversity and inclusion council within Caterpillar to encourage members to be advocates for the women in their organizations; and explained how SWE and its annual conference offered professional development opportunities. As a result, Caterpillar sent 82 people to the 2013 conference and more than 90 to the 2014 event.

Following her SWE presidency, DelVecchio accepted the challenge to lead a new group at Caterpillar focused on being early adopters in additive manufacturing.

DelVecchio is secretary of the American Association of Engineering Societies' World Federation of Engineering Organizations' women in engineering committee. She also advocates for greater diversity before the Manufacturers Alliance for Productivity and Innovation. She spoke to the alliance's board of trustees, which comprises manufacturing company CEOs, in favor of greater gender diversity. She also addressed a Women in Manufacturing forum on the same topic. The Manufacturing Institute recognized DelVecchio's leadership by granting her its STEP Ahead Award in 2015.

DelVecchio holds a B.S. in chemical engineering from the University of Cincinnati. She enjoys scrapbooking, reading, napping, and visiting national parks. She lives in Peoria, Illinois, with her husband, Kerry, and their cats, Abe and George.



FELLOW GRADE

Lynda Grindstaff

INTEL CORPORATION

For promoting SWE's mission and contributions as a role model at work and in the community, enabling other women to gain recognition and advancement in the engineering profession.

In her role as director of the innovation pipeline team for the Intel Security Group, Lynda Grindstaff has shown the kind of focus, mission, and creativity that has allowed her to soar professionally while ensuring that other women gain both due recognition and stature.

As a member of Intel's senior management rank, Grindstaff leads an international team of software developers creating future security innovations. She transformed her group into a high-performing team working on strategically important initiatives. The team won division recognition awards, and their prototypes were featured in executive keynote presentations.

Grindstaff has held numerous technical and leadership positions throughout her career. She earned both the Intel Software Quality Award and prestigious Intel Achievement Award. In her previous role, Grindstaff created and managed the software enabling strategy for Intel's portable All-in-One (AIO) device segment. She initiated, drove, and closed more than 20 business development deals with large,

worldwide software vendors. Grindstaff devised innovative use models, provided technical guidance, managed an annual \$2.5 million budget, and exceeded her goals by 30 percent, resulting in a divisional recognition award.

She also created the Intel® Small Business Advantage product (SBA). SBA makes system management, backup, and restoration easy for small business owners who may not be "tech savvy." In its first year, the product exceeded its revenue goals by several million dollars and continues to generate millions of dollars of incremental revenue annually.

Amid these success stories, Grindstaff has found time to be an active and continuous SWE member for the past 22 years, holding positions at the Society, region, and section levels. While she was earning her B.S. in computer science, she joined the California State University, Sacramento collegiate SWE section, where she held several leadership roles. In 2007, she received the Emerging Leader Award.

Grindstaff serves on the *SWE Magazine* editorial board. A specific focus of

hers is to overcome one of the engineering industry's biggest problems: helping professionals and collegians remain in the field to be role models for other women and future generations. Toward that end, she has explored the impact of unconscious bias as well as midcareer challenges.

Grindstaff is a change agent for the National Center for Women and Information Technology. She has consistently focused on how to create corporate change for more diverse and inclusive environments. She also serves as a mentor in both the SWE Collegiate Leadership Institute and Region A mentoring programs, where she has six mentees with whom she meets regularly. Grindstaff works with middle and high school STEM teachers to increase the public's awareness of engineering as a profession for women and educate them on the engineering field. She also volunteers for her children's Girl Scout and Boy Scout troops and teaches computer basics classes to homeless women.

In her free time, Grindstaff enjoys spending time as a family cycling with her husband and two children.



FELLOW GRADE

Sandra L. Pettit, Ph.D., P.E.

GEORGIA INSTITUTE OF TECHNOLOGY

For a distinguished career encompassing industry and academia, for advancing SWE's mission, and for serving as a role model and inspiration to future engineers.

Sandra L. Pettit, Ph.D., P.E., is a faculty lecturer at the Georgia Institute of Technology in the School of Chemical and Biomolecular Engineering. She leverages her positions as an instructor in thermodynamics and transport phenomena, and as the primary instructor for the Pulp and Paper Engineering Certificate Program, to give students and their parents captivating insights into the possibilities and accomplishments of chemical engineers. Outside of the classroom, Dr. Pettit serves as a mentor and role model for members of the university's SWE section.

Dr. Pettit was instrumental in chartering the SWE Tampa Bay Area Section in 2000. She served as charter president and set its strategic direction, leading to a support network of engineers and a center for information on women in engineering in the Tampa Bay area. Under her guidance, the section has been recognized for an outstanding continuing development program and an outstanding Engineers Week program.

Honored as a SWE Distinguished New Engineer in 2001, Dr. Pettit has been a member of the SWE membership committee, the Region D nominating committee,

the council of representatives, and the student activities committee. She also served as an outreach volunteer for the Atlanta Section, a mentor/advisor for the Georgia Tech Collegiate Section, and as the Region D student coordinator.

Prior to joining academia, Dr. Pettit garnered more than 15 years of engineering experience, in which she took on increasing responsibility and skill requirements with each new assignment. Her background covers plant operations, general engineering and design, and facility development and construction.

She earned her bachelor's, master's, and Ph.D. in chemical engineering from the University of South Florida (USF). She published four peer-reviewed articles on her graduate research and presented at numerous conferences, placing first in the graduate poster competition at WE12.

In 2012, Dr. Pettit received the Provost's Award for Outstanding Teaching. The culmination of her accomplishments at USF came with the 2014 Golden Bull Award, one of the university's highest honors awarded students who exemplify exceptional leadership and service to the university and surrounding community.

Also recognized for her unflinching

work in the community, Dr. Pettit is a longtime supporter of the United Way. While at USF, she served as a committee chair for various programs and was a Corporate Ambassador and a member of the executive council. She has been a leader, volunteer, and/or guest at the annual Bullarney fundraiser event since its inception more than 15 years ago. As such, she has been instrumental in the development of the organization's \$1 million endowment. Proceeds from the endowment provide collegiate scholarships and conference participation grants to engineering students at USF. The grant program subsidizes USF SWE collegiate members for participation in the annual SWE conference.

Dr. Pettit has also served on the board for the Central Florida section of the American Institute of Chemical Engineers for a number of years.

She recently celebrated her 25th wedding anniversary with husband, Ron. They enjoy spending time with their family, dining out, and traveling the world. At last count, their explorations included 35 states/territories and 11 countries.



FELLOW GRADE

Beth Snyder

THE BOEING COMPANY

For excelling in her own career while contributing time, energy, and expertise toward advancing women in engineering, through outreach and by ensuring that their accomplishments are honored.

Beth Snyder is a 33-year veteran of the aerospace industry. She is currently a member of the Boeing Network and Space Systems senior engineering core staff, responsible for engineering partnerships across multifunction platforms both internally and on customer initiatives. A senior life member of SWE, she joined the Society's Los Angeles Section in 1982 after being hired by Rockwell International, which later became part of Boeing Defense, Space & Security Systems.

Snyder has served the Los Angeles Section in many capacities, beginning in 1984 when she was program chair, responsible for organizing, coordinating, and executing monthly meetings and special events. She held increasingly responsible roles as officer until becoming section president in 1988. Under her leadership, the section started its National Aeronautics and Space Administration (NASA) Big Sisters program.

Snyder emphasized fundraising and, as president, administered the section's awarding its greatest amount of scholarships ever — \$20,000 — to local students. She also oversaw a pop-up promotional display that made it easier to show SWE's

goals to educators, parents, and the public at science, technology, engineering, and mathematics (STEM) events and school activities. Under her leadership, the Los Angeles Section received Society-level career-guidance awards. She served as the Los Angeles Section representative to the council of section representatives, and as Region B treasurer. In 1992, Snyder was named a SWE Distinguished New Engineer.

As chair of SWE's awards and recognition committee, she tapped the Society's award recipients, encouraging them to coach and mentor future candidates to enhance membership recognition. Aware of the importance of honoring women's accomplishments and the history of women in engineering, Snyder later served on the 35th and 40th anniversary committees for the Los Angeles Section. In more recent years, she has been active in supporting the SWE-Boeing Team Tech Competition and the Society's scholarship programs.

Snyder credits her SWE activities with helping her develop from an entry-level engineer to a senior Boeing manager of a diverse work force. Joining the company as a member of the Flight Operations group,

she supported several space shuttle flights, transitioning into Space Station integration support. This included supporting teams in Alabama and Virginia. Moving into satellite systems work, she was chief systems engineer on proposals, then systems engineering director for government programs at Boeing's Seal Beach, California, site. Prior to her current role, she was Boeing Navigation Programs chief engineer, responsible for technical integrity, staffing, and process and tool support.

At Boeing, Snyder has been active in the Women in Leadership organization, serving on panels and mentoring junior men and women in their careers. She also has been active in the American Institute of Aeronautics and Astronautics and the International Council on Systems Engineering, a founding member of the Los Angeles Section.

Snyder received her B.S. in aeronautic and astronautic engineering from the University of Illinois at Urbana-Champaign. Married with two children, she has been involved in gaining corporate funding for the nationally recognized school band at their high school and supports the United Student Body Leadership program.



OUTSTANDING FACULTY ADVISOR

Marca Lam, Ph.D.

ROCHESTER INSTITUTE OF TECHNOLOGY

For steadfast and inspired support of the RIT-SWE collegiate section, for creating a supportive culture that encourages young women to succeed, and for championing countless students and professional women engineers.

Marca Lam, Ph.D., is a senior lecturer at the Rochester Institute of Technology (RIT). Prior to joining RIT in 2006, she taught at The Cooper Union for 12 years, achieving the rank of tenured associate professor. She earned her B.S. and M.S. degrees in mechanical engineering from the University at Buffalo, The State University of New York and her Ph.D. from Virginia Polytechnic Institute and State University. Dr. Lam's technical specialty is vibrations and control. She teaches a range of subjects to both graduate and undergraduate students, including 3-D graphics, computer programming, materials science, system dynamics, optimal design, and the vibrations sequence.

Active in the full spectrum of issues relating to engineering education and science, technology, engineering, and mathematics careers for women, Dr. Lam has been the faculty advisor for the SWE collegiate section at RIT since 2010. She is also the current vice president and webmaster of the Rochester Section. She is an executive board member for WE@RIT, the Women in Engineering program at the

university. In addition, she is an advocate for RIT's Kate Gleason College of Engineering honors program, serves as treasurer for the Women in Engineering ProActive Network, and coordinates logistics for the RIT-hosted Mini-Baja® competition.

The driving force behind the revitalization of the RIT collegiate section, Dr. Lam has helped grow membership from 20 to 50 and generate enthusiasm on campus with interactive meetings. Under her guidance, student leaders have shifted the section's records from binders, which often got lost, to a repository on myCourses, RIT's course-management system. The easy-to-access, accurate records streamlined year-to-year transitions, enabling officers and committee chairs to do a better job of training their successors.

In addition, Dr. Lam has demonstrated to student members the importance of good business practices and financial transparency, by working with section treasurers to use spreadsheets and properly accounting for all monies. Understanding the importance of networking as a career tool, Dr. Lam has strongly encouraged student

members to attend SWE annual and regional conferences. She helps students prepare to make the most of the conference experience and encourages participation in the career fair at the annual event, helping attendees develop their "elevator speeches" and escorting them to meetings with potential employers.

Dr. Lam's work as the RIT-SWE faculty advisor is largely responsible for the increased visibility of the section on campus, which, in turn, has enabled the section to garner contributions to support a wider range of activities. A once-informal networking event between RIT-SWE alumni and the collegiate section is now officially sponsored through the RIT Engineering Alumni Office. And, professional attendees now advocate for SWE at their companies, strengthening the link between students and professional engineers.

Married to David Anderson for 20 years, Dr. Lam is the mother of two boys, Michael and Peter. She likes to bicycle, read, puzzle, and spend time with her family.



OUTSTANDING SWE COUNSELOR

Charlene Willenbring

UTC AEROSPACE SYSTEMS
SWE COUNSELOR TO UNIVERSITY OF MINNESOTA

For outstanding performance as a SWE counselor, for cultivating enthusiasm for STEM in the community, and for setting an example of work/life integration for the next generation.

Charlene Willenbring has been the counselor for the SWE collegiate section at the University of Minnesota (UMN) since 2006. Expanding the counselor role, Willenbring also serves as a liaison to the local Minnesota Section, leveraging her position to cultivate enthusiasm for professional membership. Collegiate member participation at Minnesota Section outreach and joint collegiate and professional development events has increased significantly during her tenure.

Under Willenbring's guidance, the UMN SWE section has taken advantage of the resources available through the Society and the university to strengthen its programs. Being an active UMN alumna and SWE member further strengthens Willenbring's effectiveness as a counselor. The UMN section has received the Outstanding Collegiate Section Award, Silver Level, for the past two years. In FY13, with Willenbring's support, the section hosted the Region H conference.

Since joining SWE as a student in 2001, Willenbring has held numerous leadership positions. She was co-director of the College of Science and Engineering's largest career fair and a collegiate section president. After graduation, Willenbring joined the Minnesota Section (SWE-MN),

where she became membership co-chair. She planned the first events to welcome new professional and collegiate members into the section. As a SWE-MN member, Willenbring has served as vice president, two-term section representative, and nominating committee chair. At the Society level, she was the FY13 bylaws committee chair and the FY15 counselor/faculty advisor coordinator. Willenbring received SWE's 2013 Distinguished New Engineer Award and the Minnesota Federation of Engineering, Science and Technology Societies' 2014 Young Engineer of the Year award.

She also focused on supporting collegiate sections by chairing the Region H Transition Membership program in FY11. She enjoys sharing with collegiate members all the benefits a professional membership offers.

Willenbring is currently a business development manager with UTC Aerospace Systems' military fixed-wing segment. Her responsibilities include evaluating business opportunities, developing pricing and negotiation strategies, and growing the military business. Previously, she spent several years as a program lead and developed temperature sensors used on a variety of commercial, military, and regional aircraft.

Willenbring is also active in her company's Professional Women's Council (PWC), an employee resource group focused on encouraging women to achieve their professional and personal goals and increasing employee engagement. She leads the PWC's community involvement committee, planning events and activities benefitting local organizations.

While Willenbring blends her intense job demands and SWE activities with an active family life, she still finds time for other community activities. Her enthusiasm for community involvement is matched by her dedicated focus on educating young women about opportunities in STEM. She is a weekly math tutor at a local elementary school and volunteered her time planning hands-on demonstrations for the Fox 9 Girls and Science event, hosted by a local TV station, to promote science, technology, engineering, and mathematics (STEM) fields to young girls in the community.

In her spare time, Willenbring enjoys spending time outdoors with her husband and two children. The couple has visited every Minnesota state park and hiked all 196 miles of the state park hiking club trails.



OUTSTANDING COLLEGIATE MEMBER

Emily Deas

THE UNIVERSITY OF TEXAS AT AUSTIN

For academic excellence in mechanical engineering, for creative SWE section leadership, and for introducing countless young women to SWE and encouraging them to persist in engineering.

Emily Deas earned her B.S. in mechanical engineering from the Cockrell School of Engineering at The University of Texas at Austin (UT) in May. During her time on campus, she directed her creativity and enthusiasm to the goal of building a connected community of women engineers. In addition to being active in SWE and other engineering organizations, Deas maintained a high grade point average and honors status for four years and was a college scholar three years in a row and in the engineering honors program. Pursuing her interest in improving the safety of mechanical devices, she secured two competitive internships, her first at ExxonMobil as a project controls engineer, and her second at Chevron as a facilities engineer. At Chevron, she managed projects aimed at improving offshore platform safety procedures, particularly during hurricanes. Deas continues to focus on empowering women in engineering at Shell, where she is a completions and wells intervention engineer.

Deas' involvement in the Society of Women Engineers began during her first year at UT when she was social and leader-

ship chair. After that, she served as FY13 external vice president and FY14 internal vice president. In these positions, Deas developed Intro to SWE; revamped the spring leadership retreat; and created new positions to focus on membership, academics, and professional opportunities. Under her direction, the section's social media presence was improved: The website was redesigned, more members were engaged on Facebook, and an Instagram account was created. At the conclusion of her term, Deas planned the spring awards banquet at The Austin Club, getting students, faculty, staff, and sponsors involved.

Promoting the theme "SWE Connect," Deas won the office of UT-SWE president for FY15. Her initiatives stressed the importance of strong connections among SWE members. She launched core clubs, interest groups that encourage members with common interests to socialize outside of engineering. During her presidency, membership increased by 10 percent, meeting attendance doubled, and UT-SWE won Region C's Outstanding Collegiate Section and third place in UT's

DiscoverE: Engineers Week competition. Deas was vital to planning and hosting the 2015 Region C conference in Austin, which was attended by 477 students and professionals.

Deas was a member of the engineering leadership team, which hosts leadership retreats for engineering students. She was also a member of the Women in Engineering Program (WEP), working on outreach and as a peer assistance leader. She served as a student representative on a Cockrell WEP committee that reviewed recruiting, retention, and graduation of women engineering students. For her involvement in WEP, Deas received the 2013 Rising Star Award. She was a first-year interest group (FIG) mentor for two years, during which time she was recognized as the 2012 Outstanding FIG Mentor. Off campus, Deas volunteered at many STEM and SWE outreach events, including Encounter with Engineering and Introduce a Girl to Engineering Day.

Deas has a sheltie named Mia, and in her free time, she likes to play golf and soccer.



OUTSTANDING COLLEGIATE MEMBER

Katharine Brumbaugh Gamble, Ph.D.

THE UNIVERSITY OF TEXAS AT AUSTIN

For innovations in aerospace engineering research, passionate and steadfast advocacy of engineering graduate students, and for remarkable dedication to mentoring young women engineers.

Katharine Brumbaugh Gamble, Ph.D., received her doctorate in aerospace engineering from The University of Texas at Austin (UT-Austin) in May. Her research involved systems engineering of small satellites and focused on the creation of a statistically derived and historically based risk analysis methodology for small satellites. The direction of Dr. Gamble's research was influenced by her work with the Texas Spacecraft Lab (TSL), where she led a team of undergraduate and graduate students to win the University Nanosatellite competition in 2013. She was a research and teaching assistant in the aerospace engineering department at UT-Austin and received a National Defense Science and Engineering Graduate Fellowship in 2013.

Dr. Gamble earned her bachelor's degree in aeronautical engineering from Purdue University, where her involvement with the Society of Women Engineers began. She served as community service chair, organizing events such as campus cleanups and joint volunteer efforts with The Humane Society. She then took on the job of mentoring two committee chairs during her junior year and was elected vice president in her senior year. As a graduate

student, she was the SWE grad committee co-chair for two years, directing monthly professional development and social activities and voicing the concerns of graduate students in the school of engineering.

During FY14, Dr. Gamble served the SWE graduate community as the region conference coordinator. She helped set up and develop graduate student sessions, including many research poster competitions, at each of the 10 region conferences. Since 2013, she has represented Region C graduate students to the region leadership, ensuring graduate student programming at the region conference and advising collegiate and professional sections on graduate student inclusion. As FY15 graduate member coordinator-elect, Dr. Gamble helped boost graduate student participation in SWE at the Society, regional, and local levels. In recognition of her mentoring and SWE involvement, the UT-Austin Women in Engineering program honored her with the Excellence Award in February 2015 and the Champion Award in January 2013. Dr. Gamble continues her efforts to boost graduate student participation in SWE as the FY16 graduate member coordinator.

Throughout her time at UT-Austin, Dr.

Gamble participated in the TSL Explore UT outreach program by giving lab tours. She organized and led the TSL involvement in UT-Austin's Introduce a Girl to Engineering Day extravaganza and continued to give tours of the TSL to families, school groups, and prospective students until she graduated. She has served as a mentor for several middle-school girls at the Ann Richards School for Young Women Leaders and often conducts a paper rocket activity for elementary, middle, and high school girls.

Dr. Gamble mentored undergraduates and shared her insights and expertise through the UT-Austin Graduates Linked with Undergraduates in Engineering mentorship program. She is a member of the American Institute of Aeronautics and Astronautics and a mentor and advisor with the Purdue Student Engineering Foundation, as well as a member of the SWE program development grant committee.

Dr. Gamble and her husband enjoy hiking with their dog, wine country, cooking, and everything to do with space. They recently relocated from Texas to the Washington, D.C., area to start new careers.



OUTSTANDING COLLEGIATE MEMBER

Carina Hahn

THE UNIVERSITY OF UTAH

For extraordinary commitment to mentoring young girls and women engineering students, for dedication to SWE, and for working toward advances in materials science and engineering.

Carina Hahn is a senior at The University of Utah and will receive both her bachelor's and master's degrees in materials science and engineering in May 2016. She will graduate from the Honors College as a community engaged scholar and undergraduate research scholar with minors in French and dance. She is interested in improving thin-film solar cell technology by using benign and earth-abundant materials. In 2014, she was chosen for a summer internship at the Research Interns in Science and Engineering Program at the University of California, Santa Barbara, where she researched silver nanohelical structures to be used in devices for capturing and storing solar energy. She received the summer research colloquium best poster award for her work there.

Hahn joined the Society of Women Engineers as a first-year student and served as the materials science and engineering representative. She then became secretary and the service coalition representative, meeting monthly with other student leaders and collaborating on service

events, such as a volunteer day event for engineering students. With a talent for educating and involving parents, Hahn has had several leadership roles in SWE outreach activities, including the biannual Girl Scout nights. In 2014, she wrote a curriculum for an engineering Girl Scout patch and held a patch workshop on campus. The event drew 50 girls, who watched demonstrations and participated in hands-on activities. Hahn received a SWE program development grant to support this event. She mentors high school girls who shadow SWE members and also mentors two female University of Utah engineering students, introducing them to helpful campus resources and involving them in SWE. This year, she is serving as the SWE Region B collegiate senator.

Engaged in academic and professional engineering organizations, French language and culture, dance, and campus and community service, Hahn actively pursues a wide variety of interests. She is a member of the American Institute of Chemical Engineers and was the freshman representative, acting as liaison for a class

of more than 100. She has been involved in Tau Beta Pi, the engineering honors society (TBP) since 2013 as vice president and public relations officer, in charge of recruiting new members and initiation. In 2014, she was a TBP scholar and attended the national convention and participated in society-level decisions.

In April 2013, Hahn was The University of Utah Volunteer of the Month and received a community involvement and scholastic achievements commendation from The Community Foundation of Utah. In March of that year, she designed and directed a four-week program for creative dance in a rehabilitation facility and cultural dances at a senior center. That summer she studied French in Grenoble, France.

In 2012 Hahn became a peer advisor for LEAP, a program for first-year students. She mentored two classes of engineering students and served as the service coalition representative, communicating service opportunities to the LEAP community of more than 1,500 students.



OUTSTANDING COLLEGIATE MEMBER

Melissa Lindsey

THE OHIO STATE UNIVERSITY

For academic excellence in biomedical engineering, for positive and effective SWE leadership, and for inspiring young women to follow her example as a humanistic engineer.

Melissa Lindsey graduated in May from The Ohio State University with a B.S. in biomedical engineering and a minor in Spanish. When she was an undergraduate, she interned at Kimberly-Clark and NDI Medical, promoting the Society of Women Engineers at both companies. At Kimberly-Clark, she worked as a research engineer focusing on personal hygiene paper products and minimally invasive chronic pain management devices. As an electrical engineering intern at NDI Medical, she developed medical minimally invasive chronic pain management devices. While a research assistant in The Ohio State University (OSU) department of biomedical informatics, she observed a hospitalwide transition to an electronic medical records system. Lindsey is now employed as a technical data analyst at Accenture in Charlotte, North Carolina.

She joined SWE in 2010 as a first-year student and has since been involved at all levels of the Society. As a section officer at OSU, Lindsey was outreach director,

then vice president. She helped the university establish a lasting relationship with Central Ohio Girl Scouts and with area high schools to encourage young women to enter science, technology, engineering, and mathematics fields. As the FY14 Region G collegiate senator, Lindsey represented her constituents at senate meetings and spoke on their behalf about important bylaw voting. She was also part of a successful effort to streamline Region G's travel policy to encourage members to use the travel funds available to them. As FY15 Region G collegiate representative, Lindsey helped with efforts to improve the compliance rates of sections in Region G, boost membership, and increase collegiate interest in SWE. She also led the planning of the region's productive leadership summit.

Lindsey is also actively involved in the Biomedical Engineering Society, Engineers for Community Service, and Texnikoi Engineering Honorary. She served as vice president of Texnikoi, assisting with recruitment and acceptance

of new members. Always interested in new experiences and challenging service opportunities, Lindsey worked on a project in rural Honduras with Engineers for Community Service, participated in local and out-of-state building projects with OSU Habitat for Humanity, and volunteered with Buck-I-Serv, a group that organizes alternative break service projects for students. Lindsey took part in One World Running to provide shoes to developing nations and helped with the Pinellas County Sea Grant to remove invasive species from coastal waterways in Florida.

She also works with the Montaña de Luz orphanage, an organization she first encountered when she volunteered with Engineers for Community Service. Lindsey's connection with Montaña de Luz and the opportunity her visits afford to sharpen her Spanish language skills have been sources of great personal satisfaction.



OUTSTANDING COLLEGIATE MEMBER

Leah Meeks

UTAH STATE UNIVERSITY

For accomplishments in water resources engineering, for advocacy of women in STEM that includes a deep understanding of gender issues, and for outstanding contributions to SWE programs.

A civil engineering doctoral candidate at Utah State University, Leah Meeks' dissertation centers on creating water resources network analysis tools to improve simulation modeling for river basin management. Meeks works at the U.S. Bureau of Reclamation in river and reservoir operations for the Pacific Northwest. She holds a master's degree in agricultural engineering from the University of Florida, where her thesis evaluated rain sensors that could reduce residential irrigation. Meeks earned her bachelor's in bioresource and agricultural engineering from California Polytechnic State University (Cal Poly), San Luis Obispo, with a minor in women's and gender studies.

Meeks' SWE involvement spans a variety of regions and levels. She joined the Society at Cal Poly, where she participated as the bioresource and agricultural engineering department (BRAE) major chair and was involved with High School Shadow, Evening with Industry, and section leadership retreats. Meeks became active in the SWE section at Utah State University a year into her doctoral studies. She served as the community service chair, organizing two activities per semester. She spearheaded the section's

first outstanding collegiate section application, which received a Silver Award. She also expanded the high school outreach program by getting other student engineering organizations involved and drafting a successful program development grant. Meeks is a member of the collegiate leadership coaching committee and has given more than 30 module presentations. She has presented at a number of region conferences and at WE14. She helped organize three Utah leadership summits and one Southern California leadership summit.

She is a member of the American Society of Agricultural and Biological Engineers (ASABE), the American Society of Civil Engineers (ASCE), and the United States Committee on Irrigation and Drainage. Her research on water resources has been presented at state and international meetings of numerous technical organizations. Her research has appeared in ASCE peer-reviewed publications. The American Society of Agricultural and Biological Engineers honored Meeks with the Student Engineer of the Year award in 2006 and in 2007.

At Cal Poly, Meeks held a variety of leadership positions in the Agricultural

Engineering Society. While president of the College of Agriculture's ambassadors, she led student recruitment, and her efforts helped earn the Agriculture Student Organization of the Year award. She co-coordinated the first California Ag Ambassador Conference, which was attended by 160 students from 13 universities and community colleges. She also worked with the Cal Poly Women's Center, serving as the Women's Awareness Organization vice president and focusing on women in science, technology, engineering, and mathematics (STEM) and homelessness among women. She presented a workshop called "Women in Science, Technology, and Higher Education" at the Change the Status Quo 2008 conference and participated in annual events, such as Take Back the Night, Run to Remember, and the Body Project.

A strong advocate for community service, Meeks volunteers as a Camp Reach for the Stars counselor and for United Way. She lives in Boise, Idaho, with her very supportive husband, James, and their feisty daughter, Paden. In her spare time, she plays rugby and trains for marathons.



OUTSTANDING COLLEGIATE MEMBER

Sangeetha Mylvaganam

THE UNIVERSITY OF TEXAS AT AUSTIN

For demonstrating down-to-earth leadership grounded by teamwork and collaboration in academics and embodied through outstanding contributions to the Society of Women Engineers.

Sangeetha Mylvaganam is a graduate of The University of Texas at Austin (UT Austin), with a B.S. in mechanical engineering and a minor in business. She has received numerous scholarships, including the Robert L. Mitchell Friends of Alec Excellence Fund Scholarship and the Boeing Diversity Scholarship, and has focused her technical experience in the areas of project management and lean manufacturing.

As an undergraduate, Mylvaganam performed research at UT Austin on a National Science Foundation-supported project involving the synthesis of graphene materials. During a later internship at Freescale Semiconductor, she led a team of engineering technicians to repair and optimize a factorywide wafer tracking system. Most recently, Mylvaganam interned at Boeing, creating and streamlining test build processes for 787 composite fuselage manufacturing technologies.

Mylvaganam has been actively involved with multiple engineering societies, including the Society of Hispanic Professional Engineers (SHPE), Pi Tau Sigma, and the American Society of Mechanical Engineers (ASME). She represented the Society of Women Engineers on the UT

Austin student engineering council and was named Representative of the Year for 2012-2013. Mylvaganam forged many lasting relationships between SWE and other engineering societies on campus and received the prestigious Student Leadership Award from the UT Austin Cockrell School of Engineering.

She has held a number of SWE positions at UT Austin, as well as at the region and Society levels. She began as UT SWE awards chair, garnering high-dollar grants and awards for the section. She also served as vice president of external affairs, establishing the SWEster mentorship program, pairing underclass and upperclass students to increase connections across the engineering school. She oversaw the SWEeties Engineer Together (SWEET) program, which brought middle- and high-school students together to do real-world engineering miniprojects based on a natural disaster event. She also launched a successful bid for UT Austin to host the 2015 region conference.

As UT SWE vice president of corporate affairs, Mylvaganam worked to strengthen the section's company relations and career programs, managing a budget and interfacing with some 100 company rep-

resentatives. In 2015, she increased total corporate monetary support by 50 percent from the previous year.

Mylvaganam also planned and hosted the collegiate section's annual networking night, which brings 150 students together with more than 20 companies. She created a new professional development program, SWE Career Advising and Networking (SWE CAN), where students can gain valuable career advice and planning. Recently, Mylvaganam initiated the first Endowed University SWE Scholarship for UT Austin section members.

Regionally, Mylvaganam was an FY14 SWE Future Leader (SWEFL) and attended the WE13 Collegiate Leadership Institute. As the FY15 Region C collegiate senator, she facilitated region engagement with the Society rebranding initiative and other senate discussions. Her work with her section and region resulted in the 2015 Region C Collegiate Emerging Leader Award.

Mylvaganam is currently employed as a project engineer with 3M in St. Paul, Minnesota. In her free time, she enjoys salsa dancing as a fun and energizing way to meet others, stay active, and learn something new.



OUTSTANDING COLLEGIATE MEMBER

Leabeth Peterson

HUMBOLDT STATE UNIVERSITY

For achieving and maintaining academic excellence while consistently demonstrating the enthusiasm and dedication that define a Society of Women Engineers leader.

Leabeth Peterson is a graduate of Humboldt State University (HSU) in Arcata, California, with a B.S. in environmental resources engineering. Her numerous campus achievements include serving as a proposal writer for the Humboldt Energy Independence Fund (HEIF), which resulted in \$62,000 worth of retrofits to an underutilized campus building. In 2014, she was a teaching assistant for an engineering water quality course, and provided assistance to students and feedback on technical memorandums. She held the position of project manager for the HEIF for a year, actively managing nearly 20 student-driven projects and maintaining project quality assurance by providing timely communication between stakeholders and proper resources for student interns.

Peterson completed two internships at the Redwood Coast Energy Authority, a government partner to a local energy entity. During this time, she acted as a program support and special projects intern, informing community members about energy-efficiency programs, assisting in the completion of residential energy

audit reports, and helping complete greenhouse gas inventories for six jurisdictions within Humboldt County.

After joining SWE, Peterson served as FY13 president of the Humboldt State University Collegiate Section. She strengthened the small section, increasing membership by 40 percent and gaining regional and community recognition by emphasizing outreach and professional development events. She led the section's largest professional development event, the SWE Social, which gave members the opportunity to showcase a pressure-retarded osmosis project — a small-scale tool for teaching students about reverse osmosis. Peterson also assisted the section in sending 11 members to the Region A conference, a 60 percent increase from the previous year.

In FY14, Peterson served as collegiate representative for Region A, section vice president, and as a committee member on the Region A travel and event fund committee. In this role, she managed 14 collegiate sections and provided one-on-one mentoring for collegiate section presidents. During her tenure, she

developed the *Region A Section President's Handbook* to assist with collegiate leadership transitions. Additionally, she assisted in the chartering of the University of California, Merced Collegiate Section. As HSU vice president, she acted as lead coordinator for the 2015 Girl Scout Day, hosting 47 Girl Scouts between the ages of 8 and 12.

Peterson is an active member of the American Society of Civil Engineers (ASCE). In 2014, she was lead coordinator for an engineering club fair that included ASCE, SWE, the Society of Hispanic Professional Engineers (SHPE), and Engineers Without Borders. She actively participated in an outreach program at a local middle school in conjunction with SHPE. In 2015, Peterson participated in a local ASCE water treatment competition, earning second place with her team.

She currently works in General Electric's Energy Management business, with a focus on environmental health and safety through the company's Operations Management Leadership Program. Outside of work, Peterson enjoys spending time with her dog, tap dancing, and reading novels.



OUTSTANDING COLLEGIATE MEMBER

Abigail M. Spohn

UNIVERSITY OF DAYTON

For clear academic excellence, and for early and continuing dedication to all aspects of SWE's mission, especially in STEM outreach to girls.

Abigail M. Spohn is a magna cum laude graduate of the University of Dayton (UD) with a B.S. in mechanical engineering. Among her many scholarships are the SME Alvin and June Sabroff Manufacturing Engineering Scholarship, the E. Wayne Kay Co-Op Scholarship, and the Society of Women Engineers' Cummins Scholarship.

Spohn was selected to present at her university's honors symposium, where she discussed her research regarding water bottle usage and community beliefs about recycling. Spohn was also team leader of her materials capstone engineering project that focused on investigating alternate materials for kayak paddles.

In 2013, Spohn completed an eight-month co-op with UTC Aerospace Systems, where she performed extensive brake and dynamometer testing to qualify new materials for F-16 brakes and planned and performed actuator housing evaluations to support development of next-generation electric brake systems. Over the summer of 2014, Spohn completed a four-month co-op at UTC's manufacturing facility in Los Angeles, where she learned about carbon brakes and improving processes.

She has been connected to SWE since high school, when she began searching for mentors and advice on internships. As a result, she interned in high school and the summer following graduation at Greatbatch Medical, where she performed research on pacemaker batteries and materials and coordinated lean manufacturing projects — supervised and mentored by a SWE member.

Spohn's SWE involvement expanded in college when she joined the collegiate section and took an active role. She has served as service director, conference director, and social director and now serves as vice president. Spohn's service projects include coordination and participation in TechFest™, a day of hands-on exposure to STEM for families in Dayton, and Girl Scout Badge Day, where SWE members helped girls earn aerospace badges. As social director, Spohn increased event participation of UD SWE members from eight to 30, by coordinating Pinterest Night, rock climbing events, and intramurals. As conference chair, she encouraged members to attend the annual conference in Baltimore, organizing and planning all the details, and obtaining funding so

that seven members (six students and one advisor) could attend, a significant increase over the previous year's attendance. Spohn also attended the annual Region G conference and Region G leadership conference in Columbus, Ohio, encouraging fellow students to join her, in addition to the Region G conference in West Virginia.

A member of UD River Stewards, a three-year, interdisciplinary leadership program, Spohn worked extensively on tours with the program's "River Mobile," a water-awareness mobile classroom tractor-trailer and the cohort's water-related senior project with teens. She led a team of UD students, applying for and completing a second water-awareness project, the design and painting of a water-themed mural on a rain barrel, subsequently auctioned by the Cincinnati Zoo.

Spohn is a member of Pi Tau Sigma Delta Nu and is active in multiple engineering societies. In her spare time, she volunteers with Habitat for Humanity and participates in projects for developing countries through Engineers in Technical Humanitarian Opportunities of Service Learning (ETHOS).



OUTSTANDING COLLEGIATE MEMBER

Brooke Sroczyński

UNIVERSITY OF DAYTON

For superior academic performance while spurring new levels of engagement at all levels of the Society of Women Engineers.

Brooke Sroczyński received her B.S. in civil engineering from the University of Dayton (UD) in May. She has been a recipient of several scholarships, including the 2014 SWE Elizabeth McLean Memorial Scholarship, the AGC Education and Research Foundation Scholarship, and Allied Construction Industries' Diane (Denier) Herbort Scholarship, which is awarded to an outstanding female who demonstrates drive, dedication, and leadership.

As an undergraduate, Sroczyński completed five co-op terms with Danis Construction. Throughout, she honed her communication skills with a wide variety of audiences, including clients, subcontractors, and architects. Her experiences varied from assembling bid and contract documentation to overseeing site work, and she was instrumental in developing a subcontractor database, streamlining many of Danis' processes.

Sroczyński joined the Society of Women Engineers as a first-year student at the University of Dayton in FY11. Eager to be involved, she served as the section's secretary in FY12, attending all meetings and distributing meeting minutes. She communicated with section members,

broadening communication through several methods such as email, Facebook events, and fliers to reach a broader population. Additionally, she updated the section's website, which had been dormant for many years, turning it into a usable and vibrant work space.

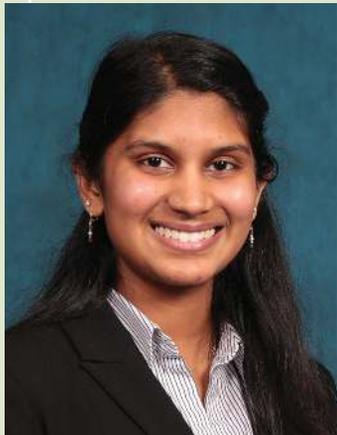
In FY13, Sroczyński became section president, and attendance at meetings increased by 50 percent under her leadership. She participated in regular meetings with the faculty advisor and hosted both officer and general member meetings. She worked closely with the section counselor to maintain compliance, stay up to date with the region, and coordinate joint events between the UD section and the South Ohio Section. Additionally, Sroczyński encouraged and organized many joint events with other campus engineering groups, including the Women in Engineering Program, Phi Sigma Rho, the ASCE, and ASME. Strongly invested in SWE, Sroczyński became Region G collegiate representative for FY14. Her expanded role included participating in region collegiate team calls, voicing collegiate concerns in regional decisions, and attending and presenting at

the leadership summit, Region G conference, and WE13.

During her term, Sroczyński discovered a passion for assisting struggling sections. Throughout the year, she reached out to noncompliant collegiate sections, raised awareness of requirements, promoted better communication, and ultimately guided them to success. Interested in learning more about SWE on a Society level, Sroczyński became Region G collegiate senator for FY15, learning about the rebranding initiative and assisting the professional senators in presenting the initiative to the region. She gracefully addressed questions and concerns throughout both the region meeting and the region collegiate meeting.

Sroczyński is currently a project engineer with Messer Construction, working on academic and medical projects. Part time, she is pursuing a master's in engineering management at UD. Determined to remain engaged with SWE at the professional level, Sroczyński has taken on the roles of UD SWE counselor and section representative for the South Ohio Section.

She enjoys spending time with friends and family and working out.



OUTSTANDING COLLEGIATE MEMBER

Dhanalakshmi Thiyagarajan

UNIVERSITY OF PITTSBURGH

For outstanding performance in multidisciplinary studies, for demonstrating depth of leadership, and for taking SWE's mission of outreach as her own.

Dhanalakshmi Thiyagarajan graduated from the University of Pittsburgh Swanson School of Engineering in the spring with a degree in bioengineering and is a first-year medical student at Temple University.

In her senior year at the University of Pittsburgh, she was group leader of a multidisciplinary project that developed a biocompatible, biodegradable mesh for dental guided bone regeneration. The semester-long project resulted in a successful prototype that was entered in the Swanson School of Engineering Design Expo, earning first prize in the product realization category.

Thiyagarajan also had two internships with GE Healthcare. In her first rotation, she helped the company's recent corporate acquisitions integrate with environmental, health, and safety standards. During her second internship, she worked on developing a method to prevent diode leakage in digital X-ray panels.

As a first-year student, Thiyagarajan began three years of literature research and development of an original study of stem cell migration in relation to tendon injuries with chemoattractants as measured by cell traction force microscopy. She was able to conduct the study individually and

presented her research at four separate poster sessions. She also received a fellowship for a different research project on celiac disease.

Meanwhile, noticing that the university's dining plan did not offer gluten-free options, Thiyagarajan founded the Gluten Free Awareness League (GFAL) to promote understanding of celiac disease in the community. Through GFAL, she organized more than 100 events, the largest of which is the annual Gluten-Free Awareness Carnival. Hearing of Thiyagarajan's success, both Udi's — a maker of gluten-free products — and the National Foundation for Celiac Awareness contacted her to promote awareness nationwide.

Thiyagarajan began her SWE career as historian and was elected mentorship chair her sophomore year, revitalizing the dormant program. As secretary in her junior year, she hosted an Elementary Engineering Extravaganza, where elementary students participated in engineering activities. The event was recognized with an outreach award at WE14.

In 2015, Thiyagarajan served as section president, with the primary goal of strengthening its community. She improved the officer program, instituting weekly executive board meetings, monthly

officer meetings, and documenting “position tips” for new officers to help speed their learning curves.

Thiyagarajan initiated the organization of more than 25 new events, including a Women in STEM Conference, a daylong event focused on leadership, professional development, and outreach. Additionally, Thiyagarajan built relationships with other on-campus organizations, such as the Graduate Women Engineering Network, to collaborate and expand her section. And, to motivate high school students to join engineering, she created High School Engineering Day, which now accommodates 100 students and their parents.

The University of Pittsburgh named Thiyagarajan 2015 Senior of the Year, awarded to students “who possess and exhibit outstanding leadership qualities in service to the University,” and the Engineers' Society of Western Pennsylvania and the Swanson School of Engineering named her the George Washington Prize recipient for 2015.

Thiyagarajan enjoys performing Bharatanatyam, Indian classical dancing, and Bollywood dancing, along with choreography. She plays tennis recreationally and enjoys spending time with her sister, family, and friends.