

# 2018 Silicon Valley WiE Conference

Saturday, March 17, 2018, 7:30 AM – 7:00 PM San José State University

Title Sponsor: Mark & Carolyn Guidry Women in Engineering Program Fund Hosted by: SJSU | CHARLES W. DAVIDSON COLLEGE OF ENGINEERING



## TITLE SPONSOR

### Mark & Carolyn Guidry Women in Engineering Program Fund

Carolyn Guidry (1937-2009) was born in Mississippi and spent her childhood in the Deep South. She earned her Bachelor of Science in Electrical Engineering at Louisiana State University in 1959. One week after graduation, she married Mark Guidry, a fellow electrical engineering major she met at LSU. Carolyn began her career at Boeing, but soon put her career on hold and devoted 20 years to raising their three children. She returned to school and earned her Master's degree in Computer Engineering from SJSU in 1979. She joined Hewlett Packard and was directly responsible for the development of a new flexible interconnect cable and the microcode for a new computer.

In partnership with Mark, Carolyn founded two successful companies in semiconductor design software and semiconductor product development. Both companies were later acquired and became leaders in their respective fields. After the second company was acquired by Integrated Circuit Systems in 1993, she founded the Mark & Carolyn Guidry Foundation and managed all aspects of the organization. She received an Award of Distinction from SJSU Davidson College of Engineering in 2006. Both she and Mark were inducted into the LSU College of Engineering Hall of Distinction in 2001.

Mark is a Louisiana native. After receiving his BSEE from LSU, he took a position at Boeing. He subsequently earned an MSEE from University of Washington and a PhD from Iowa State University. He taught at LSU, where he conducted research in semiconductor technology, laser technology, and radio wave propagation. Prior to founding their companies, Mark worked at Fairchild Semiconductor tor in Palo Alto, a small San Diego company, and Texas Instruments in Houston.

All three of Carolyn and Mark's children graduated with degrees in engineering. The Guidry family strongly believes in the power of education and the importance of developing engineering education in the U.S. for what lies ahead. The Mark and Carolyn Guidry Foundation has been a long-time leader in supporting women in engineering at SJSU. Its commitment and on-going support have made the Silicon Valley Women in Engineering program a model of success for educating new woman innovators regionally and nationally.

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## WELCOME



Welcome to the fourth annual Silicon Valley Women in Engineering (WiE) Conference at the Charles W. Davidson College of Engineering.

We are delighted to host you today, and hope you will take this opportunity to soak in the collective wisdom of women and men who have broken barriers within their industry careers, in every engineering discipline.

Breaking news stories across the country from last fall and this spring point toward a new empowerment in our pursuit of gender equity. The power comes from women sharing their stories, and both women and men listening. Revelations are leading to important public discourse, and through discourse, more humane policies can be planned.

Your presence at this conference means that you have committed to listening and sharing as well. I encourage you to meet at least three people you don't know, and share your stories as well as business cards. Make this the conference that improved your life.

I'd like to express my deepest thanks to all of the sponsors, faculty, students, and support staff that helped make this conference possible. We very much appreciate your contributions.

Enjoy the conference,

Sheryl H. Ehrman Don Beall Dean Charles W. Davidson College of Engineering, SJSU

## **CONFERENCE AGENDA**

7:30-8:30am	Registration & Breakfast
8:30-9:30am	Welcome & Opening Keynotes
9:45–10:45am	Concurrent Sessions A
11:00am-12:00pm	Concurrent Sessions B
12:15–1:45pm	Lunch Keynote & WiE Roundtable Discussions
2:00-3:00pm	Concurrent Sessions C
3:15–4:45pm	Concurrent Sessions D
5:00-7:00pm	WiE Innovation Showcase & Networking Reception/Meet the Leaders



## MESSAGE FROM Conference chair

### Win the Future



Look ahead: not decades, not even years. Imagine a Silicon Valley-span of time that may be counted in mere months, a future that is maybe even sooner than that. Imagine the power to hail a self-driving car, catch a ride, and not think a moment about parking. See yourself hopping on a bullet train to Los Angeles. Ignore the highway traffic and get there in three hours, maybe less. Envision an electronic caretaker at home: a brilliant amalgamation of hardware and software that can help grandma with her daily routines and fetch her medicine. Look no closer than your body, where genomics can produce better diagnostics and treatments of disease and discomfort. These are exciting times!

Yet these days also bring forth near-constant reminders of our vulnerabilities: to cybersecurity threats, environmental disasters, and our democratic values. As the future unfolds, sometimes faster than even we would want, technology is the key to realizing these new possibilities, and to anticipating and mitigating disasters we can barely imagine. Technology is the key. But so too is community.

That's why I am so happy to welcome you to the 2018 Silicon Valley Women in Engineering (WiE) Conference. Here we bring together nearly 100 women technologists and 450 engineering students as a community to survey today's opportunities and ponder what lies ahead. What are the key technology drivers? What are other dots that need to be connected? What are the impacts?

By "impacts", I invite you to look closer to one example I offered. Think about those self-driving cars that are right around the corner. Talk about an exciting innovation! But we are compelled to consider: What will happen to all of those taxi drivers and Uber drivers? Those Lyft drivers? What will happen to an entire transportation economy ready to be turned upside down? Think also about automobile manufacturers-here and around the world. How will they confront a future when we need fewer cars? Where will those employees go? We'd better set about finding answers to these questions, to facing new challenges that are technological, economic, social, national, international-and deeply personal.

The 2018 WiE Conference promises a great opportunity for you to explore these issues while expanding your horizons and elevating your visions. Toward that end, we are fortunate to have the participation and support of many women technologists and leaders who are committed to helping and guiding our students. They can help us look ahead to an amazing, exciting, disruptive and transformative future. That need, the need to look further ahead, brings us together as a community. Together we embrace a shared vision: a way ahead to help students, especially women students, prepare for tomorrow.

Because after all, those who are prepared for the future will emerge as winners.

### Belle Wei

Carolyn Guidy Chair of Engineering Education and Innovative Learning Charles W. Davidson College of Engineering, SJSU

## **CONFERENCE COMMITTEE**





Thalia Anagnos Associate Vice President Graduate and Undergraduate Programs



Valerie Carr Assistant Professor Psychology



Winncy Du Professor Mechanical Engineering



Magdalini Eirinaki Associate Professor **Computer Engineering** 



Ayca Erdogan Assistant Professor Industrial and Systems Engineering



Kathryn Gosselin Assistant Professor Mechanical Engineering



Lili He Professor Electrical Engineering



Hyeran Jeon Assistant Professor Computer Engineering



Younghee Park Assistant Professor Computer Engineering



Minnie Patel Professor Industrial and Systems Engineering



Jinny Rhee Associate Dean College of Engineering



Blanca Sanchez-Cruz Assistant Director Student Support Programs Biomedical, Chemical, College of Engineering and Materials Engineering



Melinda Simon Assistant Professor



**Birsen Sirkeci** Associate Professor Electrical Engineering



Xiao Su Department Chair Computer Engineering



Juzi Zhao Assistant Professor **Electrical Engineering** 



Miri VanHoven Associate Professor **Biological Sciences** 



**Catherine Voss Plaxton** Director Career Center





## **PLENARY SESSIONS**



Maggie Johnson Director of Education and University Relations Google

Morning Keynote Topic: Al for Everyone

Maggie Johnson is Director of Education and University Relations for Google. She manages all technical training and content development, and information management programs for Google engineers and operations staff, as well as Google's K12 educational programs in STEM and computer science. She also manages the University Relations area, building strategic research partnerships with faculty and labs globally.

Prior to Google, Maggie was a faculty member and Director of Undergraduate Studies in the Department of Computer Science at Stanford University.



### **Darlene Solomon**

Senior Vice President & Chief Technology Officer Agilent Technologies

### Morning Keynote

Topic: Technology Advancing the "Century of Biology"

Darlene Solomon is SVP and CTO for Agilent Technologies. She received her BS from Stanford University, her PhD in chemistry from MIT, and she completed Stanford University's Executive Development Program. In recognition of her career accomplishments, Solomon was elected to the National Academy of Engineering in 2017. She was also inducted into the Women in Technology International's Hall of Fame in 2001, received the YWCA Tribute to Women and Industry Award in 2004, and was named to Diversity Journal's Women Worth Watching in 2007 and Corporate Board Member's 50 Top Women in Technology in 2008. Solomon serves on the Board of Directors for Materion Corporation, in addition to roles on multiple academic and government advisory and review boards.



### Lakecia Gunter

Chief of Staff & Technical Assistant to CEO Intel

### Lunch Keynote

Lakecia Gunter is the Chief of Staff and Technical Assistant to Brian Krzanich, CEO of Intel. Prior to her current role, she was the General Manager of Consumer Desktop Segment Marketing team, in the Client Computing Group, where she was responsible for maximizing desktop profitability through form factor innovation and first time buyer programs, driving growth in new market segments, and driving disruption in adjacent markets to grow the desktop P&L.

Lakecia earned a Master of Science in Electrical Engineering from Georgia Institute of Technology and a Bachelor of Science degree in Computer Engineering from University of South Florida. Lakecia also earned her Project Management Professional (PMP) Certification.

Women make up 23% of engineering students at SJSU as of Jan. 1st, 2018.

The Charles W. Davidson College of Engineering with approximately 7400 students is the top provider of engineering talent to Silicon Valley industries.

Students choose SJSU Engineering because of small hands-on classes, taught by instructors with real-world experience.



### Concurrent Sessions

9:45 – 10:45 AM

## EMERGING Technology

### Track 1. Interacting with Nature

### **1A. Energy Generation and Management**

Session Chair: Kathryn Gosselin, Assistant Professor, Mechanical Engineering, SJSU

### Location: SU 3A

Amid concerns about fossil fuel consumption and climate change, engineers play a vital role in developing technologies to improve energy efficiency and sustainability. This technical session will feature engaging talks from three engineers about emerging technologies for energy generation, usage, and storage. Join us to learn about how to apply your skills to making the world a cleaner, more energy efficient place.

### Changing the Way Our World Is Powered

#### Katherine Han



Katherine is currently a solar module reliability engineer at SunPower corporation. In this position, she designs the tests and pass/fail requirements to ensure and

Reliability Engineer, SunPower

demonstrate 40+ year reliability of SunPower solar modules. Previously, Katherine attended Oregon State University where she, along with her partner, founded a solar-electric racing team, which has competed multiple times in the American Solar Challenge and the Abu Dhabi Solar Challenge. SunPower has always been dear to her heart; after making their first SunPower modules for the car in 2013, the team was able to win first place in the next Formula Sun Grand Prix. In her spare time, she enjoys house construction and competitive gymnastics.

### X-ray Characterization of Energy Materials at SSRL

#### Beth Miller Postdoctoral Researcher. SLAC



National Accelerator Laboratory Beth Miller is a postdoc at SLAC National Accelerator Laboratory's Stanford Synchrotron Radiation

Lightsource where she uses ide batteries. Beth grew up in

X-rays to look inside batteries. Beth grew up in the suburbs of Philadelphia, PA and received a B.S. in Materials Science & Engineering from Penn State. She earned her Ph.D. in Materials Science & Engineering from Northwestern University researching solid oxide fuel cells. Beth values scientific collaboration and has worked at institutions from Sandia National Laboratories to University College London to further research partnerships. At SLAC, she shares her enthusiasm for materials science by mentoring undergraduate and graduate students. In her free time, Beth enjoys baking and exploring California's landscapes.

### Energy Advisor: Predicting and Stabilizing Energy Consumer Demand



#### Shubhi Asthana

Research Software Engineer, IBM

Shubhi Asthana is a Research Software Engineer working at IBM Almaden Research Center, San Jose,

California. She leads research and development of end-to-end solutions and analytical tools in the areas of Cloud Services, Machine Learning, Energy Management & IoT, for which she has been also awarded 8+ patents. Her work has appeared at top-tier venues including SCC 2017, AI & MS 2017, ICSOC, and NIPS ML4HC 2016 among others. She has completed her Masters in Computer Engineering from North Carolina State University, USA.

### Track 2. Smart Living

### 2A. Cybersecurity

Session Chair: Younghee Park, Assistant Professor, Computer Engineering, SJSU

### Location: SU 4B

Cybersecurity has become the most significant issue in our life due to the rise of smartphones, smart homes, and smart grids connecting millions of devices to each other. This makes it difficult to identify the origin of cyber attacks in the complicated communications over a wide range of networks. Thus, we need to consider how cyber risks can be effectively managed to make smarter living safer and more secured. This session covers the key concepts of widespread agreement among industry analysts in cybersecurity with three security experts at VMware, Fortinet, and RedSeal. They will discuss cybersecurity issues and defense techniques for smart living.

### So You're Going To Be A Security Professional



Chris Newman Security Engineering Manager, VMware

Chris spent a few years writing defense software meant to keep computer systems safe. From there, he branched into writing offense

software meant to slip by defenders for a few years. After that, he started getting challenged to reverse engineer more interesting systems with the goal of finding and exploiting vulnerabilities. A big switch came when he moved to VMware and became responsible for finding issues and then getting them fixed. He now manages a team of like-minded security engineers.

### **Outsmarting the Cyber Criminals**



### Stacey Wu

Senior Vice President, Fortinet Stacey brings more than two decades of enterprise, networking, and security marketing expertise to Fortinet, with a strong track record

in global demand generation, customer-centric digital marketing, and strategic sales enablement programs. Stacey is responsible for creating brand preference, generating demand, and accelerating customer acquisition and sales productivity for Fortinet's global market opportunity.

Prior to Fortinet, Stacey was vice president, marketing and demand generation at Avaya, and prior to that, she held a variety of marketing leadership roles at Symantec, most recently VP of strategic marketing and planning. Prior to Symantec, she led various product marketing teams at Check Point Software, NEC, and HP.

Stacey holds an MBA from Massachusetts Institute of Technology (MIT) and a B.S. in Computer Science from San Francisco State University. For more information on Fortinet, please visit our website: www.fortinet.com

### Resilience | The New Imperative in Cyber Security



Julie Parrish Chief Marketing Officer, RedSeal

Julie Parrish has over 30 years of experience across sales, channel management and marketing in Fortune 500 companies. Julie has

held CMO roles at RedSeal, Check Point and NetApp and ran worldwide channel sales at both NetApp and Symantec. A Silicon Valley veteran, Julie is passionate about cyber security and has held leadership positions at four different cyber security companies, including her present role at RedSeal.

### Track 3. Improving Health

### **3A. Wearable & Medical Devices**

Session Chair: Lili He, Professor, Electrical Engineering, SJSU

#### Location: ENGR 331

Wearable electronics, from fitness trackers and the Apple Watch to Google Glass and Microsoft's HoloLens, are playing more and more important roles in our daily lives. We have become increasingly dependent and reliant on them. Wearable electronics are made possible with the advancement in all aspects of electronics, including fabrication technology, the IC design, and the internet coverage and speed. As technology tends to get faster and smaller, we can expect wearable electronics to provide more life conveniences at much lower costs in the near future.

#### Wearables - Hype or Help?



Nevran Ozguven Jain VP of Operations, Lumo Bodytech

Nevran Ozguven Jain has a wide breadth of experience in early-stage technology startups, spanning engineering, operations, product and

marketing. She enjoys leading cross-functional teams working on difficult challenges in fastpaced environments. She is passionate about using technology to solve real-world problems and make an impact in people's lives.

She is currently the VP of Operations at Lumo Bodytech, a motion science company that combines sensor data and advanced algorithms to optimize movement for better health, performance, and injury prevention. At Lumo, she runs operations, marketing, customer support, finance, and people operations.

Nevran received her M.S. and Ph.D in Materials Science & Engineering from Stanford University.

### Wearable Technology Opportunities and Development



#### Songeeta Jammalamadaka Senior Research Bioengineer, SBI International

Songeeta Jammalamadaka is a Senior Research Bioengineer in the Sensing and Diagnostics Laboratory at

SRI. She has 15 years of experience in biosensors, assay development and medical devices. Her work has led to the development of several in-vitro diagnostic medical devices and diagnostic tools for analyzing environmental samples. Prior to SRI International, she was at MIT Lincoln Laboratory and the MITRE Corporation. She has an M.S in Bioengineering from Tufts University, B. S. in Biomedical Engineering from Boston University and is a certified project management professional (PMP).

### Track 4. Maximizing Human Potential

### 4A. Augmented/Virtual Reality

Session Chair: Valerie Carr, Assistant Professor, Psychology, SJSU

### Location: SU 1A

Augmented reality (AR) and virtual reality (VR) have the potential to change the way we learn, conduct business, and entertain ourselves. Our session will cover some of the many ways that the largest companies and smallest start-ups are combining the real and virtual worlds to create exciting new experiences. Learn about the technologies and disciplines involved, the range of opportunities available, and why AR/VR has become one of the fastest growing, interesting markets today. Join us as our speakers share their journeys and discuss the promise and challenges of AR/VR!

### Daydream: Virtual and Augmented Reality at Google



### Willa Chen

Software Engineer, Google

Willa Chen is a software engineer who's passionate about elegant, robust, and maintainable code. She currently manages an

infrastructure team at Google Daydream, which builds virtual and augmented reality technology. Previously at Google, she has worked on online ads and the Debug Project (mosquito elimination). In her free time, Willa runs a weekly puzzle competition called Mission Street Puzzles, and also enjoys rock climbing, board games, and ice cream.

### VR/AR Starter Kit: How to Realize the Possibilities of Your Virtual Dreams



Jesmin Ngo Co-Founder, Tadschool

Jesmin is on a mission to transform STEM learning both inside and outside of the classroom. Before co-founding Tadschool, she

graduated from UC Berkeley with a degree in Computer Science in May 2016. She worked as a software engineer at Dell EMC on cloudnative data protection, where she had a unique opportunity to hone not only her technical skills, but also UI design and product management. Then, her VR career changed when she was selected to participate in the Oculus Launch Pad Program – where she went through an intensive few months of developing a complete augmented conversation and storytelling virtual reality experience. Jesmin is currently continuing to contribute to the VR space through her work in Tadschool. https://tadschool.com/

#### AR/VR - A Journey into Virtual Worlds

Nanci Solomon Co-Founder, Xulu Entertainment

Nanci Solomon has worked in VR and related projects for more than 20 years. As co-founder of Xulu Entertainment, she championed

the development of an intergalactic resort offering space and planetary adventures built on top of a physics-centric virtual world engine driving surround visuals and audio, motion platforms and haptic devices.

She was also co-founder of Smart Machines, a robotics company, and founded ASIC Technology & News, a technology magazine for custom chip development. Prior to that she was as an industry analyst for Dataquest covering implications and applications for new technologies, and worked in Fairchild's ASIC division.

Nanci serves on SJSU's Computer Engineering advisory board and is active in AR/VR activities on campus.

### Concurrent Sessions

9:45 – 10:45 AM

## PROFESSIONAL Development

### Track 5. Communication

### 5A. Assertive Communication

### Location: ENGR 343

This workshop is designed to help female engineers gain skills to communicate effectively in a male dominated field. We will learn and practice assertive communication skills, learn more about empowering women in engineering, and provide a safe place to share experiences.



Jimma Cortes-Smith Educational Counseling Coordinator, Counseling and Psychological Services, SJSU

Jimma Cortes-Smith, MA, is an alumna of the SJSU Counselor Education program. She is in her 13th year

of teaching EDCO 004 Personal, Academic and Career Development. In 2013, she began as a temp with SJSU Counseling and Psychological Services as an Educational Counselor; she is presently the full-time coordinator of the educational program. Ms. Cortes-Smith's passion is helping students develop their career pathways. As an introvert, she formerly struggled with weak networking skills and reserved interviewing skills, which was hampering her career growth. In recognizing this, Ms. Cortes-Smith has developed and facilitated workshops in assertive communication, in the hopes that the students will be able to build confidence, become empowered and he heard!!



Amanda Walters Counselor Faculty, Counseling

Amanda Walters, Psy.D. earned her doctorate in psychology from the California School of Professional Psy-

and Psychological Services,

chology, San Francisco in 2015. She completed her post-doctoral residency at Counseling and Psychological Services (CAPS) at San Jose State University and was then hired as a fulltime counselor faculty. Dr. Walters truly enjoys working with the students at SJSU and she is passionate about providing women with the skills to succeed!

SJSU

### Track 6. Career Strategies

### **6A. Winning Future Jobs**

Session Chair: Catherine Voss Plaxton, Director of Career Center, SJSU

### Location: SU 3B

You've heard about the Fourth Industrial Revolution, blockchain technology, gig work, and other potential disruptors to classical employment. What impact will these emerging technologies have on future career development? How can early- and mid-career candidates prepare to compete for future opportunities? Join this panel discussion with leading technologists and business strategists to find out.



### Helen Holder

Distinguished Technologist, HP

Distinguished Technologist and leader of the Nanolab in HP Labs, responsible for printed electronics, IOT tracking, display technolo-

gies, voice interfaces, and materials research.

### **Meiling Yang**

Security Engineering Manager, VMware

Versatile technology executive with strong track record building large scale platforms in eCommerce,

payment, data management and analytics. https://www.linkedin.com/in/meilingyang/

### Loretta Li-Sevilla

Senior Director of Strategy and Innovation, HP

Loretta is currently the Sr. Director of Strategy and Innovation for the Commercial PC business, with

Worldwide responsibility for the Office of the Future initiative.

She has 25 years of experience in HP and has held numerous executive and management positions across functions and businesses. Previously, she was the Director of Go-to-Market Strategy and Analytics, as well as Emerging Markets Strategy for PPS in the WW Sales Strategy organization. Prior to this role, Loretta was the Americas PSG Business Strategy and Customer Intelligence Director.

Loretta joined HP as an R&D Engineer and has held a number of management positions throughout HP in R&D, Marketing, Strategy and Ops, Supply chain, and Sales both at the group and business unit level. She spent much of her time in the Enterprise Business, including building the ISS Hyperscale business unit.

She holds a BS in Electrical Engineering from University of California, Davis, and an MBA from Santa Clara University.

Loretta is based in Palo Alto, CA.

### Rekha Thakur

Manager of Data Engineering & Infrastructure, Netflix

As Manager of Data Engineering and Infrastructure, Rekha's work is mostly focused around data engi-

neering to build data products at really big data scale. The data she produces is consumed for AI, machine learning etc., thus she is able to view AI from the data perspective.



Women at Agilent help to change the world, delivering trusted answers in food safety, water and air purity, research, fighting cancer – improving lives.

Women in engineering inspire us. They make Agilent a great place to work.

Agilent applauds WiE.

Learn more at: www.agilent.com/go/careers



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## Concurrent Sessions

## EMERGING Technology

### Track 1. Interacting with Nature

### **1B. Disaster Response & Warning**

Session Chair: Ayca Erdogan, Assistant Professor, Industrial and Systems Engineering, SJSU

### Location: SU 4A

Natural disasters are unavoidable. However, implementing preventive practices, early warning systems, building capacity for real-time coordination of rescue and relief efforts could mitigate their catastrophic effects. This technical session brings experts, who will talk about how analytics research and application meets practice during a disaster. Sara McBride and Anne Wein will talk about modeling efforts to estimate damages to evaluate economic and societal impacts that will aid decision makers prior to and during an earthquake; and visualization specialist Jessica Decker will introduce a real-time mapping app to aid rescue and relief efforts.

### HayWired: Earthquake Science into Action

#### Anne Wein

Operations Research Analyst, U.S. Geological Survey

Dr. Anne Wein cares about using scientific information to reduce earthquake risks. She coordinates research

at the United States Geological Survey (USGS), Menlo Park, California. Anne works at the interfaces of disciplines (e.g., between engineering and economics), between theory and practice, using quantitative and qualitative methods. She conducts collaborative research activities to transform natural hazard information and data into societal consequences and to investigate the communication of scientific information.

She received a 2010 Success Story award for advancing the goals of the USGS Science Strategy through the development and execution of the ShakeOut Scenario and Exercise. She holds a PhD in Decision Science from Graduate School of Business, Stanford University, 1988.

### Explorations of Research and Practice During Geological Crises

#### Sara McBride Mendenhall Fellow-Social

Scientist, U.S. Geological Survey

Dr. Sara McBride is a Mendenhall Fellow at the USGS - Menlo Park. Sara is a social scientist, specializing in hazard and risk communication.

She also has experience as a communication practitioner, working in the Canterbury (Christchurch) earthquake sequence, Kaikoura M7.8 (2016) earthquake, Samoa Tsunami (2009), and other disasters during her career.

### Innovative Resilience: A Study in Participatory Relief Mapping



#### Jessica Decker

Visualization Specialist, Fulcrum Community

Jessica Decker is a visualization specialist with a wide background in public interface design. Her previous clients include MIT,

Cornell University, and the California Academy of Sciences. Jessica is a self-taught developer, and is active in many civic data projects such as Code for America, EmpowerSF, and Google's Geo for Good program. In September 2017, Jessica initiated a crowdsourced relief platform during Hurricane Harvey that provided aid to over 28,000 people, and was the 2017 recipient of the Churchill Club Community Benefactor award. Jessica is currently a project consultant for a select list of clients in the humanitarian and infrastructure sectors, with a focus on resilience equity and community-based platform development.

### Track 2. Smart Living

### **2B. Smart Transportation**

Session Chair: Birsen Sirkeci, Associate Professor, Electrical Engineering, SJSU

### Location: ENGR 285

Smart transportation systems of the future include connected and automated vehicles, self-driving cars, unmanned aerial systems (drones), and vacuum tubes. These vehicles have various capabilities such as sensing their environment, communicating with other vehicles and/or their surrounding, and navigating without human input. The vehicles use a variety of sensors such as radar, lidar, GPS, camera, and also has the capability to interpret and analyze sensed data. Potential benefits of smart transportation include reduced cost, improved safety, improved speed and flexibility. This session will have three speakers discussig various aspects of smart transportation.

#### Self-Driving Cars



Aaraadhya Narra Solutions Architect, NVIDIA

Aaraadhya Narra is a solutions architect in the Automotive team at NVIDIA, supporting customers working on self-driving cars.

Aaraadhya has a master of science degree from Santa Clara University, focusing in machine learning and data science. Prior to NVIDIA, she worked as a software engineer at Cisco Systems.

### How Drones Are Changing the World Around Us



#### Jessie Mooberry Head of Deployment, Airbus A^3

Jessie Mooberry is Head of Deployment at Altiscope, an A^3 by Airbus Project dedicated to bringing policymakers, technologists, and NGOs

together to modernize air traffic management. She is a technologist at the Peace Innovation Lab at Stanford, and started her UAV career with Uplift Aeronautics, building fixed-wing aircraft out of a garage in Stanford with the world's first humanitarian drone cargo nonprofit. Jessie was one of the first to obtain a commercial drone license in the U.S. She sits on the Board of People's Light in Malvern, PA and is a Social Enterprise Fellow and Mentor for the Ariane de Rothschild Foundation.

### Autonomous Vehicles



### Patti Robb

Head of Silicon Valley Innovation Center, Intel

Patti Robb is the Head of Intel's Silicon Valley Innovation Center leading and advancing the industry in autonomous driving. She

works on amazing projects and uses technology to improve people's lives every day. She is a visionary, high energy executive passionate about developing and shipping innovative products while understanding the technology trends that will shape the future.

Previously, Patti was a Product Development Executive with Intel's Internet of Things Group. She was part of the team creating Intel's market leading 5G Strategy, and was also responsible for Intel's IOT Connectivity Strategy and Platform development across business verticals.

Patti is leading to close the Technology Industry gender gap and a champion of the Pay it Forward program at Intel to help develop and advance more women at the company.

Patti has 8 patents issued or pending.

### Track 3. Improving Health

### **3B. Next-Generation Diagnostics**

Session Chair: Winncy Du, Professor, Mechanical Engineering, SJSU

### Location: ENGR 345

In this session, we will discuss (1) a newly developed assay that can detect over 1250 bacteria, fungi, and viruses from a single blood sample. The method uses cell-free DNA to diagnose infections caused microbes that other tests cannot identify or the infections that are growing deep inside the body; (2) food safety testing using the next generation sequencing of DNA or RNA. By monitoring the microbiome of food ingredients, one can develop methods to be used to improve the security of the food supply chain and better understand food safety hazards and quality issues that may arise in the supply chain.

#### A Big Tech Approach to A "Small" Problem: Microbiome Characterization of Raw Food Ingredients to Improve Food Safety



### Kristen L. Beck

Technical Lead & Research Staff Member, IBM

Dr. Beck is a research staff member in the Industrial and Applied Genomics group at IBM Research. As a bioinformatician, she contributes to

the development of a web application for exploration and analysis of microbiomes of food ingredient. This research is part of the Consortium for Sequencing the Food Supply Chain which aims to detect pathogenic bacteria, identify food fraud, and detect antimicrobial resistance. Terabytes of sequencing and derived data must be processed into enhanced reports for a non-Scientist user allowing them to interpret the results that have broader implications for food safety. Dr. Beck received a Ph.D. in Biochemistry, Molecular, Cellular, and Developmental Biology with a Designated Emphasis in Biotechnology from the University of California, Davis.

### Diagnosing Infectious Disease Using Cell-Free DNA



Lily Blair Investigative Computational Biologist, Karius

I'm a computational biologist interested in the microbiome, infectious disease, and the immune system. I did my PhD at

Stanford, where I studied the dynamics of the human antibody repertoire in response to flu vaccine, and I currently work at Karius, where I do research and development of our infectious disease diagnostic.

### Track 4. Maximizing Human Potential

### 4B. Artificial Intelligence – Intelligent Assistants

Session Chair: Hyeran Jeon, Assistant Professor, Electrical Engineering, SJSU

### Location: SU Theatre

In this session, we will learn the AI assistant systems by the speakers from three leading companies.

Vibha Sinha from IBM Watson will introduce Watson Conversation Service, Personality Insights, and Tone Analyzer that together provide an expressive conversation experience between humans and conversational agents.

Lin Li from Apple will overview the Apple Siri and the Natural Language Understanding module to explain how Siri can understand user's intent. She will show a few examples of how deep learning is empowering Apple Siri NLU.

Daphne Luong from Google will overview the fundamentals of machine learning and Google applications geared by machine learning.

### Deep Learning in Siri Natural Language Understanding



Lin Li Machine Learning Manager, Apple

Lin Li is a manager in Apple Siri team where she is leading the Natural Language Understanding (NLU) modeling and machine learning

effort. Prior to Apple Inc, she was with Baidu USA and Philips Research North America leading various innovation projects using machine learning techniques. Lin Li received her Ph.D. degree from the University of Florida majoring in kernel-based neural networks and their real world applications such as brain machine interface.

### Machine Learning & Natural Language Understanding



Daphne Luong

Engineering Director, Research & Machine Intelligence, Google

At Google, Daphne Luong leads efforts in natural language understanding and human computation.

Her expertise is in building technologies from the ground up, with experience across a range of startups and established companies. Prior to Google, Daphne worked at Alphabet/Nest where she was responsible for non-device software functions, including IoT device and camera cloud platforms, data services, Work with Nest developer program, security, eCommerce platform and enterprise energy services. At Microsoft, she led the spin-out of the Tellme IVR business into [24]7 where she managed a global team responsible for building and delivering enterprise-grade predictive consumer experience platforms and products.

Daphne is an active community volunteer who advises social entrepreneurs across the globe through Santa Clara University's GSBI program and mentors local high school students. She is the recipient of the President's Volunteer Service Award, the Microsoft Silicon Valley Women's Inspiration Award and currently a board member of World Pulse.

### **Expressive Conversation Systems**

### Vibha Sinha

Senior Technical Staff Member, IBM

Vibha Sinha is a Senior Technical Staff Member at IBM Watson leading the AI Operations team, where she's driving the mission to

enable Watson's NLP and Speech technologies for various languages and domains. Prior to this she worked on Watson's PeopleInsights portfolio, developing technology to infer an individual's personality, emotions and skills from their digital contributions. Vibha's research interests include machine learning, human-computer interaction and software analytics. Before moving to IBM Watson in 2015, Vibha worked at IBM Research, India for 12 years. She obtained the M.S degree in Electrical Engineering from Stanford University in 2002 and B.E degree in Electronics and Communications from Delhi University, in 1999.



## Concurrent D Sessions

11:00 AM-12:00 PM

## PROFESSIONAL Development

### Track 5. Communication

### 5B. Assertive Communication Location: ENGR 343

This workshop is designed to help female engineers gain skills to communicate effectively in a male dominated field. We will learn and practice assertive communication skills, learn more about empowering women in engineering, and provide a safe place to share experiences.



Jimma Cortes-Smith Educational Counseling Coordinator, Counseling and Psychological Services, SJSU

Jimma Cortes-Smith, MA, is an alumna of the SJSU Counselor Education program. She is in her 13th year

of teaching EDCO 004 Personal, Academic and Career Development. In 2013, she began as a temp with SJSU Counseling and Psychological Services as an Educational Counselor; she is presently the full-time coordinator of the educational program. Ms. Cortes-Smith's passion is helping students develop their career pathways. As an introvert, she formerly struggled with weak networking skills and reserved interviewing skills, which was hampering her career growth. In recognizing this, Ms. Cortes-Smith has developed and facilitated workshops in assertive communication, in the hopes that the students will be able to build confidence, become empowered and be heard!!



Amanda Walters Counselor Faculty, Counseling

and Psychological Services, SJSU Amanda Walters, Psy.D. earned her doctorate in psychology from the California

School of Professional Psychology, San Francisco in 2015. She completed her post-doctoral residency at Counseling and Psychological Services (CAPS) at San Jose State University and was then hired as a fulltime counselor faculty. Dr. Walters truly enjoys working with the students at SJSU and she is passionate about providing women with the skills to succeed!

### Track 6. Career Strategies

### 6B. Interpersonal Skills in Workplace *Location: SU 1B*

This workshop leverages participant examples and discussions to understand communication cues and people-savvy skills that are needed for successful workplace relationships and collaborative teaming. These skills are essential in any industry including engineering. But first, you must "know thyself".



### Wendy Mueller

Joint Utility Manager, ExteNet Systems

Wendy Mueller has worked in the wireless telecom industry for 13 years. She started her career with

Nextel as a sales office manager and trainer. Recognizing Wendy's desire to learn more about wireless telecommunications, Nextel sent her to Schaumburg, III to attend Motorola Systems School in 2001 which lead to a job in technical operations troubleshooting network failures. Over the years, Wendy's interest in the burgeoning technology industry grew and she took every opportunity to learn more and work in every aspect of the wireless telecom industry, including site acquisition and permitting, FCC environmental compliance, FAA compliance, site design and construction.

Wendy is currently a Joint Utility Manager at ExteNet Systems, and her area of responsibilities encompasses joint use for California and acts in an advisory role for Safety and Compliance on a National level. As a testament to her utility industry knowledge and expertise, Wendy was unanimously voted 2018 President of the Northern California Joint Pole Association [NCJPA]. Wendy's tireless work and dedication in the wireless industry and has enabled her to introduce more women to this fast-growing field.

**Tina Simms** Consultant, Tina Simms Consulting

Tina Simms is a retired Senior Network Process & Quality Manager for AT&T's Network Operation Construction and Engineering

West Region. Currently, she is an independent consultant for the Northern California Joint Pole Association. Tina's AT&T background also includes Outside Plant Design Engineering (Project Pronto-DSL, Project Lightspeed-Uverse) as well as AT&T's Fiber to the Building Project VIP.

Tina holds a Masters in Telecommunications Management from Golden Gate University. She is a highly sought after part-time instructor for the University of Phoenix's Bay Campus and is also a 2013 Distinguished Faculty of the Year Awardee, as voted by the students. Tina has been a California MESA AT&T industry volunteer since 1997. She has supported and guided MESA statewide and local funding efforts toward specific AT&T funding and hiring resources (AT&T Aspire, AT&T Technology Development Program). Tina is a sought after Leadership and Diversity presenter for Northern California and Bay Area STEM college and high school events. She is also the recipient of President Obama's Service Award. Tina Simms truly lives for the opportunity to assist others with tapping into their full individual potential.



### **DIFFERENT IS BEAUTIFUL.**









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(intel)









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				At-A-C	
7:30 — 8:30 AM	-			Conference Registration	
8:30 — 9:30 AM			Al f Technology Advan	Welcome & Mo or Everyone – Maggie Johso cing the "Century of Biolog Location: B	
9:30 — 9:45 AM	-			Break	
			Emerging	Technology	
	1. Interacting with Nature	2. Smai	rt Living	3. Improving H	
Concurrent Sessions A 9:45 — 10:45 AM	1A. Energy Generation and Management Location: SU 3A	2A. Cybersecurity Location: SU 4B		3A. Wearable & N Devices Location: ENGF	
10:45 — 11:00 AM	-			Break	
Concurrent Sessions B 11:00 AM — 12:00 PM	1B. Disaster Response and Warning Location: SU 4A	2B. Smart Transportation Location: ENGR 285		3B. Next-Gene Diagnostic Location: ENG	
12:15 — 1:45PM	Lunch Keynote & WiE Round Lakecia Gunter, Chief of Staff and Tech Location: Ballroo				
1:45 — 2:00 PM	-			Break	
Concurrent Sessions C 2:00 — 3:00 PM	1C. Smart Cities Location: ENGR 341	2C. IoT – Smart Homes Location: ENGR 337		3C. Personalized N Location: ENGF	
3:00 — 3:15 PM	-	L		Break	
				C	
Concurrent Sessions D 3:15 — 4:45 PM	I. Software and Information Location: SU Thea	Technology Itre	II. Ele	ectronics and Biomedica Location: SU 1A	
4:45 — 5:00 PM	-			Break	
5:00 — 7:00 PM		١	WiE Innovation	Showcase & Netwo Location: Ballroom	

### alance

### & Continental Breakfast

rning Keynotes n, Director of Education, Google **y**" – Darlene Solomon, CTO, Agilent Technology

allroom A/B

		Professional Development					
ealth	4. Maximizing Human Potential	5. Comr	nunication	6. Career Strategies			
/ledical 8 331	4A. Augmented/Virtual Reality Location: SU 1A	5A. Assertive Communication Location: ENGR 343		6A. Winning Future Jobs Location: SU 3B			
ration s <b>3 345</b>	4B. Artificial Intelligence – Intelligent Assistants Location: SU Theatre	5B. Assertive Communication Location: ENGR 343		6B. Interpersonal Skills in Workplace Location: SU 1B			
Itable Discussions nical Assistant to CEO, Intel m A/B							
/ledicine 1 345	4C. Smart Manufacturing Location: SU 1B	5C. Negotiation Location: SU 3B		6C. Planning for Career Success Location: SU 4A			
areer Pane	els						
ıl	III. Semiconductor Equipment and Aerospace Location: ENGR 285		IV. Building, Infrastructure, and the Environment Location: SU 4B				

orking Reception/Meet the Leaders C & Ballroom Foyer

### Concurrent Sessions

2:00-3:00 PM

## EMERGING Technology

### Track 1. Interacting with Nature

### **1C. Smart Cities**

Session Chair: Magdalini Eirinaki, Associate Professor, Computer Engineering, SJSU

### Location: ENGR 341

New technological advances, like autonomous cars, pose interesting challenges for state legislators, urban planners, and transportation specialists. In this session, we will learn about transportation-related initiatives of the State of California and the city of San Jose, focusing on sustainable solutions that bring harmony between people, technology, and the environment.

### **Sustainable Smart Cities**



Margaret Cederoth Sustainability Director, WSP

Margaret Cederoth, AICP LEED AP ENV SP, is the sustainability director for WSPs US infrastructure sector. She has over 17 years of experience in the areas of

transportation and sustainability. Ms Cederoth has developed sustainability strategies and managed the implementation process for major infrastructure projects in the US and Middle East. She led sustainability efforts for the Masdar Institute project in Abu Dhabi from 2007 to 2009. She has also worked on complex carbon neutral projects and high-performance facilities in the U.S. and currently manages the sustainability program for the California High-Speed Rail Authority.

### Smart Cities / Many Meanings



Ellen Greenberg Deputy Director for Sustainability, Caltrans

Governor Jerry Brown appointed Ellen Greenberg in 2016 as the Caltrans Deputy Director for Sustainability, a position created to lead

the department's efforts in developing and implementing initiatives to align with California's goals on sustainability. Prior to joining Caltrans, Ellen was a Principal at Arup, working in San Francisco and London on major planning and infrastructure projects. Her career includes over three decades of work in the public, private and non-profit sectors. Ellen holds degrees in Geography, City and Regional Planning, and Transportation Engineering from UC Berkeley.

### Incorporating Autonomous Vehicles into a Multi Model Ecosystem



**Jill North** Program Manager, City of San Jose

Although Jill is new to the public sector in her role as the Innovation Program Manager for the Department of Transportation in San

Jose, she is no stranger to how emerging technology can change the way people experience

the world around them. After 5 years as a Program Manager for Streetview at Google Maps, Jill is looking to bring her expertise leveraging technology to make San Jose the most innovative city in America.

A native of Illinois, Jill earned her Bachelor of Business Administration at Illinois State University in 2007. In 2014, she was granted the National CEO Award of Excellence for her Streetview collaboration with Parks Canada. Beyond her professional life, Jill enjoys footgolf and the Oakland A's.

### Track 2. Smart Living

### 2C. IoT – Smart Homes

Session Chair: Juzi Zhao, Assistant Professor, Electrical Engineering, SJSU

### Location: ENGR 337

The new technology of smart home based on Internet of Things (IoT) makes our lives easier, more convenient, and more comfortable. In this session, Dr. Hsiao of Mayfield Robotics will share their home robots; Ms. Corno of Cisco will describe the ideal IoT professional and describe the skills needed to bring the Information Technologies and Operational Technologies together and to activate IoT projects in any environment; and Ms. Zaplata of NETGEAR will speak on "Smart Home Today, Smarter Home Tomorrow".

### Smart Home Today, Smarter Home Tomorrow

### Tihana Zaplata

Firmware Manager, NETGEAR

Tihana Zaplata is a Firmware Manager with a degree in Computer Science from UCSD. In her 18 year career, Tihana has worked mostly

in the wireless telecommunications industry, developing cellular devices, embedded modules, and mobile hotspots. Currently working in the IoT space at NETGEAR, Tihana leads the Arlo base station firmware team to engineer highly secure solutions as part of the Arlo Smart Home Security ecosystem.

### What the Ideal IoT Professionals Look Like



Antonella Corno Senior Manager of Product Strategy, Cisco

Antonella Corno is the Senior Manager of Product Strategy at Learning@Cisco. She actively manages the

development of the learning portfolio, overseeing a team that translates information from hardware and software developers to architects of technology training and certification. After spending more than two decades across two continents working in technology research and development for leading Information Technology (IT) firms, Antonella understands the challenges that individuals face when entering, training and updating skills in the IT industry. Antonella works tirelessly to build frameworks for these individuals to enable the learning process. Antonella is a CCIE Emeritus, has spoken at several international conferences, and holds multiple international patents.

### You, Me & a Robot Makes 3–Tomorrow's Modern Family



Kaijen Hsiao Chief Technology Officer, Mayfield Robotics

Across my career at MIT, Bosch, and Willow Garage, I have assembled, accelerated, and led robotics teams

producing marketable breakthroughs that have sparked startup businesses in the US and Europe. A few more accolades: Robohub honored me as one of the "25 Women in Robotics You Need to Know about," and I've also been honored as one of Silicon Valley Business Journal's "Women of Influence."

### Track 3. Improving Health

### **3C. Personalized Medicine**

Session Chair: Miri VanHoven, Associate Professor, Biological Sciences, SJSU

### Location: ENGR 345

With new technologies that allow mapping and sequencing of genomes in weeks, rather than decades, we have the potential to make treatments more effective by personalizing them. The field of personalized medicine has the potential to revolutionize medicine, allowing us to better understand the molecular underpinnings of diseases, and tailor treatments to individuals. This session will focus on how personalized medicine is being moved forward both in academic settings and in Silicon Valley.

### Data Driven Approaches for Personalized Medicine



### Gini Deshpande CEO, NuMedii

Gini is founder & CEO of NuMedii, an Al driven biopharma company focused on discovery of new precision therapeutics. As

CEO, she structured critical partnerships with several large pharma companies and raised Series A from VCs. Previously, she helped Affymetrix and other companies with market development strategies for their ground breaking technologies. She led innovation at Children's Hospital Boston for the creation of new devices for the tiniest of patients. Gini helped commercialize early stage technologies in research tools, diagnostics & therapeutics and has closed licensing deals worth several million. Gini received her MS from the University of Pune (India), her PhD in Biological Sciences from Purdue University, and did post-doctoral work at the Massachusetts General Hospital.

### Studying Pregnancy Outcomes in the Era of Precision Medicine



### Marina Sirota Assistant Professor, UCSF

Marina is currently an Assistant Professor at the Institute for Computational Health Sciences at UCSF. Prior to that she has worked

as a Senior Research Scientist at Pfizer. She completed her PhD in Biomedical Informatics at Stanford University. Dr. Sirota's research experience in translational bioinformatics spans over 10 years during which she has co-authored over 40 scientific publications. Her research interests lie in developing computational integrative methods and applying these approaches in the context of disease diagnostics and therapeutics with a special focus on studying the role of the immune system in disease. As a young leader in the field, she has been awarded the AMIA Young Investigator Award in 2017.

### Track 4. Maximizing Human Potential

### 4C. Smart Manufacturing

Session Chair: Minnie Patel, Professor, Industrial and Systems Engineering, SJSU

### Location: SU 1B

The current trend of automation and data exchange in manufacturing is known as Industry 4.0. It creates a "smart factory". Smart manufacturing and the Smart Factory is a broad category of manufacturing with the goal of optimizing the manufacturing process. Smart manufacturing process employs computer controls, modeling, big data and other automation to improve manufacturing efficiencies. In this session, 3D printing as catalyst for the fourth industrial revolution and HP's roadmap for 3D printing business, snapshot of new era of Intelligent Factories, what Industry 4.0 revolution will look like 10 years from now. and what customers utilizing Falkonry ready-touse machine learning and predictive analytics system have to say about their victories will be presented.

### **3D Printing**



#### Michelle Bockman Global Head of 3D Printing, HP

Michelle Bockman is the Global Head of 3D Printing Commercial Expansion & Development at HP Inc. In this role, she focuses

on growing the market through key customer engagements, global alliances, materials partner programs, applications development, creating new software solutions, and ensuring the best customer experience and outcomes.

Previously, Michelle had a long career at GE, most recently as executive vice president at GE Digital where she led the company's ambitious strategy to build a software-driven digital future for large industrial customers and establish GE Digital as a \$15 billion stand-alone P&L. With more than 20 years of digital industrial experience, she has led a variety of functions in the healthcare, industrial cybersecurity, pharmaceutical, and automotive sectors spanning commercial, engineering, service, and supply chain roles.

Michelle holds a B.S. in mechanical engineering from the Missouri University of Science & Technology and is based in Palo Alto, California.

### Smart Manufacturing: The Revolution Story Foretold



Nikunj Mehta Founder & CEO, Falkonry

Nikunj founded Falkonry after realizing that very valuable operational data produced in industrial infrastructure goes mostly

unutilized in the energy, manufacturing and transportation sectors. Nikunj believes hard business problems can be solved by combining machine learning, user-oriented design, and partnerships.

Prior to Falkonry, Nikunj was Architect and VP Customer Success at C3 IoT. Earlier, he led innovation teams at Oracle focused on database technology and led the creation of the IndexedDB database standard for HTML5.

He holds both Masters and Ph. D. degrees in Computer Science from the University of Southern California, and a Bachelors degree in Computer Engineering from University of Mumbai. He has contributed to standards at both W3C and IETF, and is a member of the ACM.

### Intelligent Factories: Enabling Manufacturing's Future



Joan K. Vrtis Chief Technology Officer, Multek/Elex

Dr. Joan K. Vrtis is the CTO at Multek, a subsidiary of Flex, Ltd. Multek is a global manufacturer of interconnect

and circuit technology. Dr. Vrtis' core focus is interconnect advancements in IoT, 5G, Automotive & Medical and enabling Smart Factory principles into existing and future Multek factories. Prior to Multek, Dr. Vrtis was COO of Shocking Technologies, an embedded ESD product company, COO of Kemeta, a medical device company. In the mid-2000s, she was a principal owner and CTO of FlipChip International, an advanced packaging provider with operations in Arizona and China. Dr. Vrtis began her microelectronics career at Intel Corporation developing Pentium technology. She has several patents and holds an MS & Ph.D. Polymer Engineering, Masters Metallurgy, BS Chemistry and an MBA.

### Concurrent Sessions

2:00-3:00 PM

## PROFESSIONAL Development

### Track 5. Communication

### 5C. Negotiation

### Location: SU 3B

In this workshop, participants will learn how to be an effective negotiator in everyday situations as well as in business.



Rosie Zepeda Founder & CEO, Compelling Conversations, LLC & Latina Success Network

Rosie "the Closer" Zepeda is a Professional Speaker and CEO of Compelling Conversations, an organizational

development training and diversity marketing consulting company (www.compelling-conversations.com). Using a signature "leadership through effective communication" system, the company fosters human potential and inclusion strategy in: STEM Education, Tech and with Conscious Organizations.

Rosie is also the Founder of Latina Success Network, the premier community for culturally relevant professional and self-development (www.latinasuccessnetwork.com). LSN has two signature annual academies: Communication and Start Up.

Rosie is currently running for San Jose City Council District 9.

She is a graduate of Santa Clara University where she received a BA in Theater Arts/Spanish Literature and Communication. She was a Reader's Digest Fellow at Herbert Lehman College for her Master's in Education and a Teach for America/AmeriCorps Alumni. In 2016, Rosie was recognized with a Silicon Valley Business Journal "Woman of Influence Award."

Rosie has been singing mariachi since the age of 4. She is a huge documentary movie buff, staunch environmentalist and animal lover.

### Track 6. Career Strategies

### 6C. Planning for Career Success

Session Chair: Kelly Masegian, Career Counselor and Liaison to College of Engineering, Career Center, SJSU

### Location: SU 4A

This panel discussion will be focused on best practices for diverse female engineers in building a career in the tech sector. Panelists will share their experiences and advice for career success.



Richard Liu Co-Founder & CEO, Leap.ai

As a long time tech exec at Google, Richard was a key leader of a number of Google businesses, including Enterprise Search, Shopping, Offers and Project Fi. It was here that he became deeply aware of how hard it is to both attract and develop talented young people. As an investing partner with TEEC Angel Fund, he regularly puts his money where his heart is – supporting early stage companies solving the world's most intractable problems.

Richard holds a PhD in electrical and computer engineering from the University of Florida, a master's in automation from Tsinghua University in Beijing and an MBA from Southern Methodist University.



Helen Grays-Jones Community Relations Manager, Meriwest Credit Union

Helen Grays-Jones is the Community Relations Manager for Meriwest Credit Union. Prior to joining Meriwest, she worked for Golden

1 Credit Union overseeing 11 branches with 71 employees. She has over 30 years of experience as a leader in Banking and Financial Services.

Helen served as President for the Santa Clara Chapter of the California/Nevada Credit Union League for three years, currently serves on the Board of Directors for two agencies; the Bill Wilson Center and SEMI Foundation. Helen studied Business Administration at Canada College, graduated with honors from the American bankers Academy Retail Banking/ Leadership classes and continues in her ongoing education.



#### Kelly Masegian

Career Counselor and Liaison to College of Engineering, Career Center, SJSU

Kelly Masegian is the SJSU Career Counselor for STEM careers and Liaison to College of Engineering, and

former Internship Coordinator with the Foothill/ DeAnza Internship Program at NASA Ames. She received her MS in Counseling Psychology with an emphasis in Career Counseling from Our Lady of the Lake University in San Antonio, TX. She also received a Career Development Facilitator certification from the National Career Development Association as a supplement to her degree. She is passionate about helping students with career development and is a proponent of lifelong learning.

#### Meagan Pi Vice President, Google

Vice President, Google Identifying as a "modern geek," Meagan Pi leads gTech Velocity, an organization that is working to transform the mobile web

experience and bring Search and the Assistant to more surfaces. Meagan started her career at Google in 2002 as an engineer before becoming a manager and leader in Google's technical account management teams. As a strong advocate for her team and their customers, Meagan believes investing in trust-based relationships and diverse team leads to the greatest success. Outside of Google, Meagan enjoys running, skiing, and spending time with her two kids. Fun fact: Prior to University, Meagan had a childish and fun stint as a flight attendant!



### Concurrent Sessions 3:15-4:45 PM

## CAREER PANELS

### Panel I. Software & Information Technology

Session Chair: Xiao Su, Department Chair, Computer Engineering, SJSU *Location: SU Theatre* 



Divya Ashok Director of Product Management, Salesforce

Divya is Director, Product Management for Salesforce's global strategic customers. She manages

product readiness for key accounts resulting in product enhancements and new functionality for all customers. Her team works on scaling existing features for enterprise customers.

Divya's is also the Global President for Salesforce Women's Network (SWN), a resource group that focuses on empowering and supporting women across the organization. She actively participates in diversity initiatives to help move the needle across the industry.

She has lived in 5 countries and traveled to 35+ countries. In her spare time, she loves hosting friends and family.

You can reach out to her on Twitter @diviAshok

Carol Carpenter VP of Product Marketing, Google



Carol is a geek with a passion for technology and solving customer problems. She's been in tech marketing for most of her career, start-

ing as a product marketing manager at Apple. She loves building and scaling new products and has done that at both small and large companies in varying roles as CMO, GM and most recently as CEO before joining Google Cloud.

She is particularly proud of the high-performance teams she's developed and the fact that many of her prior marketing mavens are all doing impactful work across tech companies.



Joanna Guerrero Customer Success Engineer,

**ClearStory Data** 

Joanna Guerrero was born in the small town of Dinuba, CA, located in the Central Valley, an agricultural valley that dominates the

geographical center of California. She has an undergraduate degree in Computer Science from California State University, Chico, and a Master's degree in Software Engineering from San José State University. As a software engineer for IBM, she was with the company nearly 16 years and was responsible for the build and release processes of multiple database management products. She recently moved from VMWare, company that provides cloud and virtualization software and services to ClearStory Data. Joanna currently serves as Chair of the SJSU MEP Industry Advisory Board and Industry Advisor to the Society of Women Engineers.



#### Erica Lockheimer Senior Director of Engineering,

Senior Director of Engineering, LinkedIn/Microsoft

Erica Lockheimer has been at LinkedIn for over 8 years and is a Senior Director of Engineering where she leads

the Engineering team focused on increasing growth in new members and deepening engagement with members across LinkedIn's products. She is also responsible for LinkedIn's Women in Tech (WIT) initiative that is focused on empowering women in technical roles at the company. Prior to LinkedIn, she worked at Good Technology as Director of Server Engineering to securely manage and synchronize email and calendar data between Exchange and mobile devices. She loves the challenge of starting with something nascent and carving out the right strategy, hiring the best people, and plotting a course to drive results. In 2014 and 2015, Erica was also voted the top 22 women engineers in the world by Business Insider. Erica is a San Francisco Bay Area native and is a graduate from San José State University with a B.S. in Computer Engineering.

### II. Electronics & Biomedical

Session Chair: Lili He, Professor, Electrical Engineering, SJSU *Location: SU 1A* 



Michelle Bockman Global Head of 3D Printing, HP

Michelle Bockman is the Global Head of 3D Printing Commercial Expansion & Development at HP Inc. In this role, she focuses

on growing the market through key customer engagements, global alliances, materials partner programs, applications development, creating new software solutions, and ensuring the best customer experience and outcomes.

Previously, Michelle had a long career at GE, most recently as executive vice president at GE Digital where she led the company's ambitious strategy to build a software-driven digital future for large industrial customers and establish GE Digital as a \$15 billion stand-alone P&L.

With more than 20 years of digital industrial experience, she has led a variety of functions in the healthcare, industrial cybersecurity, pharmaceutical, and automotive sectors spanning commercial, engineering, service, and supply chain roles.

Michelle holds a B.S. in mechanical engineering from the Missouri University of Science & Technology and is based in Palo Alto, California.

### Judy Chou



With more than 20 years of industry experience in biomanufacturing and drug development, Dr. Judy Chou currently heads the Global Pharmaceutical Product

Supply Biotech organization overseeing the

manufacturing and distribution of Bayer's \$3 billion biotechnology product portfolio. In addition, she serves as the site head for Bayer's facility in Berkeley, CA, USA.

Before Bayer, she held the role of Vice President of Pharmaceutical/Technical Operations at Pfizer, Inc., formerly Medivation, where she led the Development and Manufacturing organizations for both biologics and small molecule products. She was also Vice President of R&D at Tanvex Biopharma, Inc., where Dr. Chou led the development of rich pipeline projects and provided leadership in R&D, manufacturing, preclinical and clinical functions to enable the success of the company's IPO. Throughout Dr. Chou's career, she has achieved significant milestones in protein therapeutic development and multiple filings of BLAs and INDs of novel products. She is recognized for her work at Genentech, Wyeth Biopharma/Pfizer and Abbott Bioresearch/ AbbVie, and has contributed to the development of breakthrough technologies in analytical characterization and the accelerated process and formulation development.

Before joining the industry, Dr. Chou was also a research faculty member at Harvard University Medical School, focused on cell biology and neuroscience research. Dr. Chou obtained her Ph.D. from Yale University and completed her post-doctoral training at Max-Planck Institute in Germany.



### Diana Chung

Senior Director of Clinical Operations, Gilead Sciences

Diana Chung is a Senior Director of Clinical Operations at Gilead Sciences. She received her BS in Biochemistry at Case Western Reserve

University and a MS in Molecular & Cellular Biology at the University of Maryland. She provides leadership in the Inflammation/Respiratory therapeutic area to execute global clinical trials in areas including rheumatoid arthritis, inflammatory bowel disease, and other autoimmune diseases. Previously, she led the Early Development team that manages Phase 1 studies across all therapeutic areas. She has supported NDA/MAA submissions for several of the currently marketed therapeutics including Stribild®, Sovaldi® Zydelig®, Harvoni®, Genvoya®, Odefsey® and Descovy®. She is an active member of Women@ Gilead and the Running community.



### Isaura S. Gaeta

VP and General Manager, Intel

Isaura S. Gaeta is vice president and general manager of systems engineering in the Platform Engineering Group (PEG) at Intel Corporation. She leads the team respon-

sible for optimizing overall workflow to improve engineering efficiency and effectiveness, with a focus on improvements in execution capacity, quality management systems, and operational excellence for a global engineering organization of 18k people. Gaeta also manages PEG's people systems and serves as chief of staff for the group's senior vice president of engineering. A 30-year veteran of Intel, Gaeta has managed engineering and operations teams in PEG since 2013. Gaeta spent the first two decades of her Intel career managing the development of various semiconductor processing technologies. Her work during that period led to two patents and five Intel Achievement Awards, the company's highest recognition.

### Panel III. Semiconductor Equipment and Aerospace

Session Chair: Jinny Rhee, Associate Dean, College of Engineering, SJSU *Location: ENGR 285* 

### Location: ENGR 285



Regina Freed Managing Director of Patterning Technology, Applied Materials

Regina Freed is Managing Director of Patterning Technology of Applied Materials. She has more

than 20 years of experience in the semiconductor industry, managing lithography, metrology, and defect inspection development for both logic and memory processes. Before joining Applied in 2015, she worked at KLA-Tencor and several semiconductor start-up companies, focusing on marketing and product development.



Aga M. Goodsell Deputy Director of Exploration Technology, NASA

Dr. Aga Goodsell is the Deputy Director of Exploration Technology at NASA Ames Research Center. She has held this Senior

Executive Service position since September 2016. She joined NASA in 1987 as an aerospace engineer, moved into line management as Chief of the Aerothermodynamics Branch in 2008, and became Associate Director for Exploration Technology in 2012. She served as Acting Deputy Director for Exploration Technology in August 2015 until her permanent appointment. Dr. Goodsell received her B.S. in Aerospace Engineering from the University of Notre Dame; her M.S. in Aeronautics/Astronautics from the Massachusetts Institute of Technology; and her Ph.D. in Aeronautics/Astronautics from Stanford University. She holds a private pilot certificate with an instrument rating.



Shellane Maher

ASIC & FPGA Design Engineering Manager, Lockheed Martin SSC

Shellane Chan Maher is an ASIC & FPGA Design Engineering Manager at Lockheed Martin Space

Company within the SSC Electronics Engineering organization with 16 direct reports. Shellane is responsible for establishing and providing common processes, tools and engineering personnel across LOBs specifically for ASICs and FPGAs for flight and ground systems as well as customer demonstrations. Shellane has worked in the aerospace industry for the last 16 years. Prior to joining Lockheed Martin SSC in 2002, Shellane was an ASIC Physical Design Engineer at IBM – Microelectronics. Shellane earned a Bachelor of Science degree in Electrical Engineering from Loyola Marymount University of Los Angeles and a Master of Science degree in Digital Logic Design/VLSI Design from Santa Clara University at Santa Clara.



VP & General Manager, KLA-Tencor

Dr. Lena Nicolaides, is the Vice President and General Manager of Laser Scanning and Swift products

at KLA-Tencor. She is responsible for product profitability, product development, customer relationships and international collaborations on semi-conductor equipment.

Lena has held various technology and business leadership positions at KLA-Tencor, including general manager of the Implant Metrology Division and chief technology supply executive where she was responsible for supplier business development. Prior to assuming her current role, Lena was vice president and general manager for macro inspection and SensArray products where she led high-performing teams to achieve profitable growth. Before joining KLA-Tencor, Lena held senior marketing and engineering roles at Therma-Wave Inc and PTD Inc.

Lena is the author of more than 50 technical articles and holds 30 US patents. She is an active mentor for young professionals. She received her doctorate in Mechanical Engineering from the University of Toronto.

### Panel IV. Building, Infrastructure, & the Environment

Session Chair: Thalia Anagnos, Associate Vice President, Office of Graduate and Undergraduate Programs, SJSU

Location: SU 4B



Donya Q. Amiri

Associate Transportation/Civil Engineer, City of Fremont

Her dream is to break through the barriers and misconceptions of Afghan women in science, technol-

ogy, engineering, and mathematics (STEM) and to use her education to make a difference in her community. Donya Amiri attended SJSU where she earned two degrees in Civil Engineering and one degree in Business. She holds two engineering licenses from the State of California Board for Professional Engineers. As an Associate Engineer for the City of Fremont, the city she has called home for over 25 years, Ms. Amiri has been in charge of the traffic signal infrastructure and operations. She's leading signal communication and modernization projects. She is also a busy mom of three children--Monisa (3), Imran (5), and Arsalan (7). She and her husband Waheed love to travel and play with their kids.

#### -Continued to page 24

## CAREER PANELS (CONTINUED)



Soniya Chopada Engineering Manager, Therma

Soniya, P.E., LEED (AP) is a HVAC enthusiast who enjoys the diverse variety of facilities that this high-tech capital of the world offers.

In her 20-year career, she's worked on Educational, Semiconductor, Bio-Tech, Data-Center, and Mixed-Use Commercial projects to meet its unique goals driven by budget, schedule, energy efficiency, or sustainability. She is holding Bachelor's degree from College of Engineering Pune, and Master's degree from University of Iowa both in Mechanical Engineering. She is currently the Engineering Manager at Therma.

On the personal note, her message to you-"If you enjoy problem solving and teamwork, give the careers in construction a thought. Good luck and may the force be with you"!



Mahvash Harms Structural Engineer / Principal, Biggs Cardosa Assoc.

I was born in Tehran, Iran and was the only female student accepted to the Civil Engineering School of

Pahlavi University in Shiraz, Iran. After about 3.5 years at Pahlavi University, we migrated to the Bay Area. I continued my education at SJSU where I finished my BS and MS in Structural Engineering.

I am a principal at Biggs Cardosa Assoc. and am PIC of our SF and Oakland offices, and also manage a design team in our SJ office.

I have over 35 years of experience including many multi-disciplinary bridge and building projects such as 152 /156 and structures along Hwy 101 and 680 as well as a unique single arch pedestrian bridge over railroad tracks at Bay Street in Emeryville.

On a personal note; I am an avid walker and Hiker and try to walk at least 20 miles a week!

### Chie Clar

Nina Hawk Chief Operating Officer, Santa Clara Valley Water District

Nina Hawk is the Chief Operating Officer for the Santa Clara Valley Water District's Water Utility Enterprise. She

is responsible for leading Santa Clara County's water supply program consisting of: water importation, surface reservoir operations and storage, groundwater management, raw and treated water delivery, drinking water treatment, water recycling and purification, and water conservation programs. She holds a BS in Civil and Environmental Engineering and a Master of Public Administration both from San José State University, and is a recipient of the "Rising Star Award" by Municipal Management Association of Northern California.



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## WIE INNOVATION SHOWCASE

### 5:00-7:00 PM



Women at Agilent help to change the world by delivering trusted answers in food safety, water and air purity, research, fighting cancer – improving lives. Together, they make Agilent a great place to work.

Agilent is a global leader in life science, diagnostics and analytical laboratory technologies. Leveraging more than 50 years of expertise, we create instruments, software, services and solutions that provide trusted answers to our customers' most critical questions. We are passionate about helping our customers solve their most ambitious scientific challenges, increase laboratory performance, and advance the quality of life.

Please stop by our booth for an invitation to a site tour of Agilent headquarters in April. You will meet the Agilent Team, learn about what we love most about our jobs, and how you can join our Agilent global family.



Applied Materials is the leader in materials engineering solutions used to produce virtually every new chip and advanced display in the world. Our expertise in modifying materials at atomic levels and on an industrial scale enables customers to transform possibilities into reality. In a Virtual Reality experience powered by Samsung Oculus, take a glimpse inside the Maydan Technology Center, our state-of-the-art facility dedicated to advanced chip manufacturing. At Applied, our innovations make possible the technology shaping the future.



The City of San Jose Transportation Department recently implemented major transportation projects like BART and Rapid Bus Transit to help address regional transportation challenges. San Jose is also actively working to transform the city's street network to promote bicycle and transit as a viable, safe and efficient mobility options. We will highlight exciting multi-disciplinary engineering opportunities that exist in public works, as well as growing non-traditional engineering opportunities in emerging traffic signal and streetlight technologies and applications devised to improve roadway safety towards zero traffic fatalities, reduce digital divide, and improve environmental sustainability. Participants will have an opportunity to tour San Jose's stateof-the art Traffic Management Center located at City Hall at a later date.

### Ballroom C (Student Union 2nd Floor)





To help your business get ready for a future era of digital manufacturing, HP is working hard to enable new materials innovations that break down some of the traditional barriers to 3D printing adoption. Produce functional parts in full color, black or white — with voxel control — in a fraction of the time. The cost-effective HP 3D printers tailored for small/medium-sized product development teams, design firms, and universities.



### Artificial Intelligent (AI) MICROSCOPE Demonstrated by Dr. Tom Zimmerman

A half billion years ago, plankton, the invisible creatures that float in the oceans, tripled the amount of oxygen in the air, which led to an explosion of life, which led to us. Come see a new microscope invented at IBM to keep them happy, and keep us alive.

### Spatio-Temporal Epidemiological Modeler (STEM)

### Demonstrated by Dr. Kun Hu

STEM is a tool designed to help scientists and public health officials create and use models of emerging infectious diseases. STEM uses mathematical models of diseases to simulate the development or evolution of a disease in space and time (e.g., avian flu or salmonella).

### IOT Application Demonstrated by Dr. German H Flores

A sensor is a device that measures physical properties that describe the current state of a system or environment. This research focuses on using two sensory devices for different indoor/ outdoor applications: Bluetooth Low Energy (BLE) beacons for localization, and a Time-of-Flight (ToF) camera for crowd counting.

### Human-in-the-loop Tool for Entity Resolution (ER) Demonstrated by Dr. Min Li

Demonstration of an active learning system that (1) explores both likely false positive and likely false negative examples to learn easily interpretable and changeable ER rules; (2) employs performance optimization to reduce system response time in big data scenarios. A system on matching scenarios from medical publication domains will be showcased.



### Self-Driving Car

Intel & Mobileye's technology powers the "eyes" and "brains" in the majority of the autonomous test cars on roads today. The fleet will showcase Intel and Mobileye's full suite of safety-minded and economically scalable software, including surround-view computer vision, crowdsourced REM-based mapping and localization, several levels of sensor fusion, efficient, semantic-based artificial intelligence (AI) for driving policy (decision-making), and a formal safety layer. Our 100 car fleet will be used for development and validation providing a highly scalable and cost-effective L4/L5 platform.

### Shooting Star Drone / Drone Light Shows

Our record-breaking flights take the wonders of drone technology and transform them into an entirely new form of entertainment. With Intel drone light shows, brands have the power to brighten up the night sky with a perfectly choreographed light show with hundreds of drones—creating a stunning way to communicate.

### KLA Tencor

KLA-Tencor is the leader in process control. We research, develop, and manufacture the world's most advanced inspection and measurement equipment for the semiconductor industry helping to solve our customer's most challenging problems. We enable the digital age by empowering IC manufacturing at leading edge technology nodes. This is done by pushing the boundaries of optics, sensors, image processing, machine learning and computing technologies, creating systems capable of finding defects as small as 10 nm.

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NETGEAR® Inc., the worldwide leader in home networking and smart home security products, is proud to be a sponsor of the 2018 Silicon Valley Women in Engineering Conference.

Our award winning Orbi WiFi Systems have been lauded for their innovative design and engineering. They have a unique, industry-first Tri-band architecture that extends both reliable WiFi coverage and maximum internet speed throughout your entire home.

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Please stop by the SEMI Foundation table to register for your complimentary invitation to SEMICON West, the premier microelectronics and semiconductor conference focusing on innovation, technology, and talent. The industry has thousands of open positions to fill and HR personnel from major companies will be on hand to meet you. In addition, attendees will be able to sign up for an industry mentor, have their resume reviewed, visit Head Shot Central for a professional, up-to-date photo, and much more. At the SEMI Foundation table, you can register for your complimentary invite to attend this important event. SEMI Foundation is a non-profit organization dedicated to education, career exploration, and workforce development. We are serious about connecting companies with university talent.

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Come experience VR and AR demos using the HTC Vive goggles (Virtual Reality) and Microsoft Hololens glasses (Augmented Reality) to get a sense of how these technologies are transforming the ways we learn, work, and play.

Discover the many cross-disciplinary opportunities in this explosive field and the steps you can take to immerse yourself in the field. If you have an interest in hardware or software development, AI, human factors and user interface, graphics, mechanics, optics, audio, kinesiology, psychology, or art and design, there's a place for you. Google, Facebook, Intel, Microsoft, Apple, and Amazon are just a few of the many companies actively recruiting for AR/VR positions. Come learn how you can help transform reality as we know it.

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Synopsys provides products and services in the global electronics market. Our technology is at the heart of innovations that are changing the way we live and work. The Internet of Things, autonomous cars, wearables, smart medical devices, machine learning and computer vision are just a few of the breakthrough markets where our products play an important role.

For example, machine vision and deep learning are being embedded in highly integrated SoCs and expanding into emerging high-volume applications such as automotive, surveillance, and augmented reality. A major challenge in enabling mass adoption of embedded vision applications is in providing the processing capability. The Synopsys DesignWare® Embedded Vision Processors are fully programmable and configurable IP cores that have been optimized for embedded vision applications. The EV processors help provide fast, real-time, and accurate object detection and recognition.

## NETWORKING RECEPTION/ MEET THE LEADERS

### Ballroom & Foyer (Student Union 2nd Floor)



### Networking Reception 5:00 – 7:00 PM

Connect with other women, peers, potential future co-workers, and mentors, while enjoying good food and music at Silicon Valley's best conference for women in engineering.

### Meet the Leaders

### 5:30 – 6:30 PM

You'll have an opportunity to meet industry leaders who will share their experiences and provide career advice.

Station #1 - Carol Carpenter, VP of Product Marketing, Google

Station #2 - Lena Nicolaides, VP and General Manager, KLA-Tencor

Station #3 - Michelle Bockman, Global Head of 3D Printing, HP

Station #4 - Mahvash Harms, Structural Engineer/Principal, Biggs Cardosa Assoc.

Station #5 - Joanna Guerrero, Customer Success Engineer, ClearStory Data

Station #6 - Regina Freed, Managing Director of Patterning Technology, Applied Materials

Station #7 - Aga M. Goodsell, Deputy Director for Exploration Technology, NASA Ames Research Center

Station #8 - Soniya Chopada, Engineering Manager, Therma

Station #9 - Diana Chung, Senior Director of Clinical Operations, Gilead Sciences

Station #10 - Erica Lockheimer, Senior Director of Engineering, LinkedIn/Microsoft

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## **COMMITTEE MEMBERS**



Thalia Anagnos Associate Vice President, Office of Graduate and Undergraduate Programs

Dr. Thalia Anagnos is the Associate Vice President of Graduate and Undergrad-

uate Programs at San José State University. As an SJSU professor for 34 years, she has taught a range of courses in mechanics, statistics and probability, design, and technical writing. She is a civil engineer with a focus in earthquake engineering and has focused her research on regional losses from future earthquakes and the risk due to the collapse of older concrete buildings. She recently co-authored a sophomore level engineering textbook that is completely online and incorporates interactive technologies for presenting concepts and assessing student work.



#### Valerie Carr Assistant Professor, Psychology

Valerie Carr is an Assistant Professor in the Department of Psychology at SJSU. As a cognitive neuroscientist, Valerie conducts interdis-

ciplinary research involving the application of
computer programming to creating experiments
and analyzing data. She collaborated with fac-
ulty across several departments to help develop
SJSU's new minor in Applied Computing for
Behavioral and Social Sciences (ACBSS). This
minor is designed to develop the programming
skills of students in fields such as psycholo-
gy and economics, equipping them to solve
real-world problems in their chosen domains.
Valerie currently teaches the first course in the
ACBSS minor series, which covers the applica-
tion of Python to current social science topics,
as well as the use of programming in careers
such as data analysis, user experience, and
econometrics.



Winncy Du Professor, Mechanical Engineering

Dr. Winncy Du is the director of Robotics Lab at SJSU. She received her PhD, two MS, and BS degrees from

Georgia Tech, West Virginia University, and Jilin University, respectively. She is the sole author of one sensor textbook and co-author of two sensor books. She has received many research grants and has published many journals and peer-reviewed conference papers.



Magdalini Eirinaki Associate Professor, Computer Engineering

Dr. Magdalini Eirinaki is an Associate Professor at the Computer Engineering Department of the College

of Engineering at SJSU. Her research interests cover the areas of web mining and recommender systems and, in particular, on social network mining, aspect-based recommendations, interactive database exploration, social recommender systems and personalization. Most recently, as member of the SJSU Center of Smart Technology, Computing, and Complex Systems (STCCS), she has been involved in several smart city projects. She has published several papers in refereed journals and international conference proceedings in the above areas. Dr. Eirinaki received the SJSU distinguished faculty mentor award in 2015 and is the recipient of the 2017 Applied Materials Award for Excellence in Teaching.



Ayca Erdogan Assistant Professor, Industrial and Systems Engineering

Dr. Erdogan is an Assistant Professor at San José State University Department of Industrial and Systems

Engineering. She received her PhD in Operations Research form North Carolina State University. Previously, she was a Post-doctoral Research Fellow at Stanford University, and visiting assistant professor at University of California. Her research interests are applications of statistical and operations research methods. She builds data-driven models and methods to optimize operations in service and production systems. She also works on building stochastic simulation models for disease progression to find optimal treatment scenarios that would guide public health policy.



Kathryn Gosselin Assistant Professor, Mechanical Engineering

Dr. Kathryn Gosselin joined SJSU in the fall of 2015 as an Assistant Professor of Mechanical Engineering. Her

doctoral work at the University of Connecticut focused on developing novel optical diagnostic techniques for studying combustion, and her current research applies those same skills to the study of various technologies for sustainability, including natural ventilation, wind power, and air quality. Dr. Gosselin teaches courses in the thermo-fluids area, and she is very interested in improving engineering education through student engagement and innovative, evidencebased techniques.

### Lili He

Professor, Electrical Engineering

Lili He is a professor at San Jose State University, Department of Electrical Engineering. Lili graduated from Nanjing University for

BS in Semiconductor Physics. She received her Master and PhD in Electrical Engineering from State University of Buffalo. Her research area is mainly in semi-conductor device. Recent year, her research area is focused more in nano-electronics and solar cell and related systems.



**Hyeran Jeon** Assistant Professor, Computer Engineering

Hyeran Jeon is an Assistant Professor at the Computer Engineering Department. Her research interests

include reliable and energy efficient throughput processor design, software and hardware interaction, and emerging memory and storage systems design. She earned her Ph.D. at the University of Southern California in 2015. She spent her summer at IBM T.J. Watson Research Center and the fall at AMD Research as a research intern in 2012. Before pursuing her Ph.D., she worked as a systems software engineer at Samsung Electronics, Korea from 2002 to 2009.



Younghee Park Assistant Professor, Computer Engineering

Younghee Park is an assistant professor in Computer Engineering of San Jose State University.

She received her Ph.D. in Computer Science from North Carolina State University in 2010. She has conducted a broad range of research in security areas, including SDN/NFV security and IoT security. She has two NSF grants related to Smart City and SDN/NFV. She has worked on four industry projects in SDN/NFV, supported by Arista Inc., Nexenta Inc., and VMware Inc. She is a coordinator for the Cybersecurity Certificates program supported by the NIETP. Since 2016, she has served as Center Executive at the Center for STCCS at SJSU, a multidisciplinary research center in the area of the Smart City. She obtained an award of excellence as a distinguished faculty mentor for the SJSU Student Research Competition in 2017. She received the College of Engineering Research Professor Award, as the Kordestani Endowed Chair from 2016 to 2017.



Minnie Patel Professor, Industrial and Systems Engineering

Minnie H. Patel is a Professor in the Department of Industrial & Systems Engineering at San

José State University. She has received Charles Davidson College of Engineering Applied Material's award for teaching excellence in 2010 and ISE Department Newnan teaching excellence award in 2009. She has taught variety of courses at the undergraduate and graduate level in the areas of applied statistics, operations research and engineering economic analysis in the department as well as other academic institutions. Her research interests are in applied statistics and operations research applications. She has published numerous articles in these areas in a variety of refereed technical journals. She has also presented research papers in these areas at various national and international level conferences. She was the Chair of Industrial & Manufacturing Engineering Department at University of Wisconsin-Milwaukee before joining San José State University in 2002.



**Jinny Rhee** Associate Dean, College of Engineering

> Dr. Jinny Rhee is currently the Associate Dean of the College of Engineering at SJSU. Her research interests

include thermal management of electronics and renewable energy technologies, as well as engineering education and student success. She ioined SJSU in 2002 as a professor of Mechanical Engineering. She received a PhD in Mechanical Engineering from Stanford University

in 1995.



Blanca Sanchez-Cruz Assistant Director, Student Support Programs, College of Engineering

After working in TRiO pre-college programs,

providing support services to first-generation/ low-income high school students in the San José community, for over 8 years, Ms. Sanchez-Cruz joined the College of Engineering at San José State University as the Assistant Director for Student Support Programs to support college efforts in areas of retention, graduation and inclusion, especially among underrepresented student populations. In this position, her many roles include: MESA Engineering Program Director, Silicon Valley WiE Conference Manager, college representative to campus-wide Chicanx/ Latinx and African American Student Success Task Forces, Administrator of the National Action Council for Minorities in Engineering Scholarship (block) Grant, and Liaison to Engineering affiliated student organizations.

Ms. Sanchez-Cruz received a Masters of Arts Degree in International Service and Leadership (2008) from Roehampton (UK), BA in Global Studies (2005) and BS in Hospitality Management (2003) from San José State University.



Melinda Simon Assistant Professor. Biomedical, Chemical, and Materials Engineering

Dr. Melinda Simon joined the department of Biomedical, Chemical, and Materials

Engineering in Fall 2017, after postdoctoral fellowships at the Stanford University School of Medicine and Lawrence Livermore National Laboratory. Her research is focused on the use of microfluidics to conduct drug toxicity screening and to engineer tissues for regenerative medicine applications.



**Birsen Sirkeci** Associate Professor, Electrical Engineering

Birsen Sirkeci is an associate professor in the department of Electrical Engineering at San José

State University (SJSU). Prior to joining SJSU, she was a postdoctoral researcher at UC Berkeley, CA. She received her Ph.D. from Cornell University, Ithaca, NY in 2006. Her research lies in the areas of wireless communications, sensor networks and statistical signal processing.



Xiao Su Department Chair, Computer Engineering

Xiao Su is Professor and Chair of Computer Engineering Department at San José State University.

She received her Ph.D. in Computer Science from the University of Illinois at Urbana-Champaign. Professor Su conducts research in broad areas of software systems, computer networking, multimedia communications, network security, and cloud computing. She has actively involved students in her research projects and has supervised over 200 master project students. Professor Su has published over 60 articles in IEEE and ACM sponsored conferences and journals. She has been a principal or co-principal investigator in multiple grants, from NSF, NASA and IT industry. She was a recipient of Charles Davidson College of Engineering Applied Material's award for teaching excellence in 2012, a recipient of Charles Davidson College of Engineering Faculty Award for excellence in scholarship in 2010, and a recipient of NSF CAREER award in 2006.



Miri VanHoven

Associate Professor, Biological Sciences

Dr. Miri VanHoven earned her PhD in Genetics from the University of California San Francisco in Dr. Cori

Bargmann's laboratory, and completed her postdoctoral research at Stanford University in Dr. Kang Shen's laboratory studying neural circuit formation. She came to San José State University (SJSU) in 2008. Her teaching primarily focuses on genetics, neuroscience, and science communication. Her research focuses on understanding the molecular mechanisms that underlie critical

steps in formation of the nervous system and she has been awarded research grants from the NSF and NIH. Dr. VanHoven collaborated with Dr. Sami Khuri, chair of the SJSU Department of Computer Science, to develop a Minor in Bioinformatics and now serves as the program's advisor. She also collaborated with Dr. Sami Khuri and a multidisciplinary group to develop an MS in Bioinformatics. Dr. VanHoven will serve as a graduate coordinator for the program, and the first student cohort will begin in spring 2019.



**Catherine Voss Plaxton** Director. Career Center

Catherine has led the SJSU Career Center team since 2016. She came to the Center with extensive experience in individual and orga-

nizational performance development in industry, non-profit, and education settings. Catherine's experience includes leading global talent-development and enterprise-IT program teams as well as teaching postsecondary business and counseling courses. She holds degrees in economics, HR/OD, counselor education, and is pursuing her doctorate in educational leadership.



Belle Wei

Carolyn Guidy Chair of Engineering Education and Innovative Learning, College of Engineering

Dr. Belle Wei served as Provost and Vice President for

Academic Affairs at California State University, Chico, and as the Charles W. Davidson College of Engineering's Don Beall Dean of Engineering at San José State University (SJSU) for ten years. She is currently SJSU's Carolyn Guidry Chair in Engineering Education and Innovative Learning.

Dr. Wei has been a champion for fostering inclusive excellence, bolstering STEM education, and broadening participation in computing by creating new interdisciplinary computing degree programs. She led the expansion of educational access for historically underrepresented groups, and the development of the Engineering Pathways to Success initiative that brings Project Lead the Way curricula to middle and high schools in the SF/Silicon Valley region.

Dr. Wei chaired the Engineering Deans Council's Diversity Committee in 2009-2012, and spoke before U.S. Congress in 2006 on innovation, contributing to the 2007 America COMPETES Act.

Juzi Zhao



Juzi Zhao joined SJSU as an Assistant Professor of Electrical Engineering. She holds a Ph.D. from The George

Washington University. Prior to joining SJSU, Juzi worked as a postdoc researcher at University of Massachusetts Lowell and Chalmers University of Technology (Sweden). Her research area is networking.

## **EVENT AND SESSION LOCATIONS**







### **Engineering Building 3rd Floor**





**Engineering Building 2nd Floor** 

### Engineering Building 1st Floor





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