



SAN JOSÉ STATE UNIVERSITY

# ENGINEERING FOR HUMANITY

Silicon Valley **WE** Conference '16



**SATURDAY, MARCH 12, 2016, 8:30 AM - 7:30 PM**

**CHARLES W. DAVIDSON COLLEGE OF ENGINEERING**

Title Sponsor:

**The Mark & Carolyn Guidry Women in Engineering Program Fund**

Champion Sponsor:





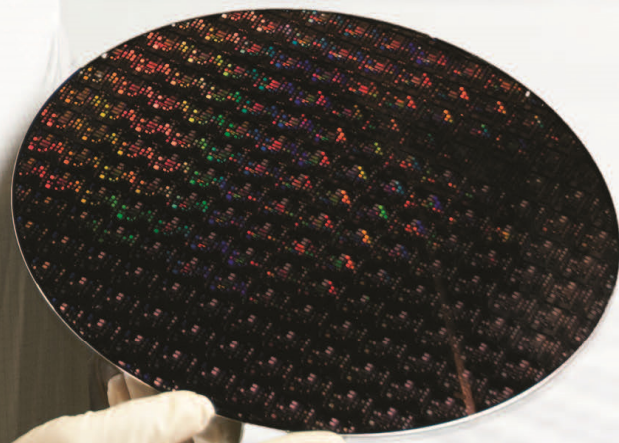


# CELEBRATING Technical Diversity

Applied Materials values diversity as a competitive advantage and as one of our greatest assets. It is weaved into the fabric and values of our company and fuels creativity and innovation. Diversity provides us with a rich perspective on our markets and makes Applied Materials a vibrant place to work.

To learn more about career opportunities at Applied Materials, visit [www.appliedmaterials.com/company/careers](http://www.appliedmaterials.com/company/careers)

Applied Materials is committed to diversity in its workforce including Equal Employment Opportunity for Minorities, Females, Protected Veterans and Individuals with Disabilities.



MARLA FIELDS  
Technical Project &  
Program Manager





*“I got my start by giving myself a start.”*

- Madame CJ Walker



Thanks to the generous contribution of the Mark & Carolyn Guidry Family Foundation, the Silicon Valley Women in Engineering Conference was made a reality at SJSU as part of a wider effort to support aspiring women engineers.

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 degree in Computer Engineering from SJSU in 1979. She joined Hewlett Packard and was directly responsible for the development of a new flexible inter-connect cable and the micro code 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 and 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 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. Their support has enabled SJSU to launch the inaugural Silicon Valley Women in Engineering Conference in 2015.

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My warmest welcome to the second annual Silicon Valley WiE Conference. We at the Charles W. Davidson College of Engineering are very excited to have you attend the conference this year. I would also like to extend my heart-felt appreciation to all of the sponsors, faculty, students, and support staff that helped make this conference possible.

SJSU is proud to be among the top US institutions providing bachelors and masters level engineering education (*US News & World Report*). Additionally, several other media and industry publications have put SJSU on the top of a short but prestigious list of the most desirable universities from which new engineers are hired by Silicon Valley industries. We are also very proud of the fact that we have one of the most diverse student bodies in the country.

I hope this conference will serve to promote women in engineering and their career success, and wish everyone a successful conference.

Best regards,

**Andrew Hsu**  
The Don Beall Dean  
Charles W. Davidson College of Engineering

## CONFERENCE AGENDA

<b>7:30 AM</b>	<b>Registration &amp; Continental Breakfast</b> Location: Student Union	<b>2:00 PM</b>	<b>Concurrent Sessions (3rd Rotation)</b> Locations: On pages 5-10 & 13-14
<b>8:30 AM</b>	<b>Welcome &amp; Keynote Talks</b> “Creating a Better Tomorrow” <b>Lisa Alvarez-Cohen, UC Berkeley</b> <b>Isabel Mahe, Apple</b>	<b>3:15 PM</b>	<b>Career Panels</b> Locations: On pages 5-10 & 13-14
<b>9:45 AM</b>	<b>Concurrent Sessions (1st Rotation)</b> Locations: On pages 5-10 & 13-14	<b>4:30 PM</b>	<b>Conference Reception</b> Location: Student Union
<b>11:00 AM</b>	<b>Concurrent Sessions (2nd Rotation)</b>	<b>5:15 PM</b>	<b>Gala Dinner &amp; Closing Keynote</b> “WiE Work Together” <b>Tsu-Jae King Liu, UC Berkeley</b> <b>Keynote: Leyla Seka, Salesforce</b> Location: Student Union Ballroom
<b>12:15 PM</b>	<b>LUNCH: Roundtables &amp; Keynote</b> “WiE Learn Together” <b>Keynote: Safra Catz, Oracle</b> Location: Student Union	 <b>***Information Booth***</b> Engineering Building Lobby	





## Conference Chair



The great Irish poet William Butler Yeats wrote, "Education is not the filling of a pail, but the lighting of a fire."

This gathering, the 2016 Silicon Valley Women in Engineering Conference, is the spark: a chance for leaders, professionals, students, faculty, and community to gather together and inspire women students to seek an education in engineering, to realize their dreams of helping people, solving problems, and creating a better future - for themselves and for all humankind.

We are here to tackle the challenges of climate change, affordable healthcare, better living, and smart energy production in an increasingly interconnected world.

For students, these challenges demand your diligence and your best efforts. But I assure you: This is work worth doing. And your efforts will pay off, not only in personal and professional development but in your potential to help improve the lives of billions of people around the world.

Getting to this point has required the contributions of many people. And as this year's conference chair, I am deeply touched by the enthusiasm of our community: SJSU women faculty and staff, sponsors, colleagues from Stanford and U.C. Berkeley, and presenters and speakers from industry and government agencies.

Living and working in the heart of Silicon Valley, we often feel overwhelmed with our labors. And yet we choose to gather together on a Saturday, because we share a common vision, that the engineering challenges of the 21st century call for the best among us, men and women.

Let's get to work!

Belle Wei  
Guidry Chair for Engineering Education  
2016 Conference Chair

## Program Committee



**Dr. Thalia Anagnos**  
AVP Graduate &  
Undergraduate Programs



**Dr. Magdalini Eirinaki**  
Associate Professor  
Computer Engineering



**Dr. Hyeran Jeon**  
Assistant Professor  
Computer Engineering



**Dr. Minnie Patel**  
Professor  
Industrial & Systems Engr



**Dr. Birsan Sirkeci**  
Associate Professor  
Electrical Engineering



**Dr. Peggy Boylan-Ashraf**  
Assistant Professor  
Aerospace Engineering



**Dr. Stacey Gleixner**  
Chief of Staff  
Interim AVP, SASS



**Dr. Nicole Okamoto**  
Department Chair  
Mechanical Engineering



**Dr. Jinny Rhee**  
Associate Dean  
College of Engineering



**Dr. Xiao Su**  
Department Chair  
Computer Engineering



**Dr. Winncy Du**  
Professor  
Mechanical Engineering



**Dr. Kathryn Gosselin**  
Assistant Professor  
Mechanical Engineering



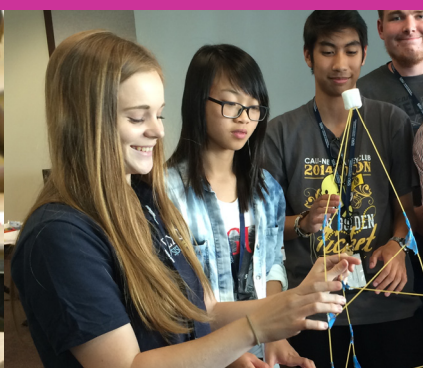
**Dr. Young Park**  
Assistant Professor  
Computer Engineering



**Dr. Liat Rosenfeld**  
Assistant Professor  
Materials & Chemical Engr.



**Dr. Laura Sullivan-Green**  
Associate Professor  
Civil Engineering





~~~BREAKFAST~~~

## *Creating a better tomorrow*

### GREETINGS

**Dr. Belle Wei**

Chair for Engineering Education, SJSU

### WELCOME ADDRESS

**Dr. Jinny Rhee**

Associate Dean of Engineering, SJSU

### SJSU WELCOME

**Carl Kemnitz**

Deputy Provost, SJSU

### OPENING KEYNOTE TALK #1

*Environmental Solutions*

**Dr. Lisa Alvarez-Cohen**

Civil & Environmental Engineering  
UC Berkeley

### OPENING KEYNOTE TALK #2

*Wireless Innovation...Making a  
Difference in the World*

**Isabel Mahe**

VP of Wireless Technologies, Apple

~~~Lunch~~~

## *WiE Learn Together*

### LUNCH KEYNOTE TALK

**Safra Catz**

Chief Executive Officer, Oracle

### ROUNDTABLE DISCUSSIONS LUNCH

~~~Dinner~~~

## *WiE Work Together*

### CLOSING KEYNOTE ADDRESS

**Dr. Tsu-Jae King Liu**

Chair of Electrical Engineering &  
Computer Engineering, UC Berkeley

*How to Succeed In Silicon Valley  
Without Losing Your Soul*

**Keynote: Layla Seka**

GM & SVP, Salesforce Desk.com

## *Creating a better tomorrow*



**Lisa Alvarez-Cohen** is the Fred and Claire Sauer Professor in the Department of Civil and Environmental Engineering at UC Berkeley. She is a fellow of the American Academy of Microbiology and a member of the National Academy of Engineering. She is on the Editorial Advisory Board of *Environmental Science and Technology* and is an Associate Editor of *Environmental Engineering Science*.

Professor Alvarez-Cohen co-authored a textbook entitled *Environmental Engineering Science*, available from John Wiley and Sons. Alvarez-Cohen, along with Professor William Nazaroff, developed this text using experience teaching CE 111, a junior-level undergraduate environmental engineering class at UC Berkeley.



**Isabel Mahe** serves as Vice President of Wireless Technologies at Apple, and has done so since 2008. At Apple, Isabel built and leads a world-class wireless engineering organization, responsible for wireless technologies for Apple's products.

Isabel has been in the Wireless Engineering industry since 1997; prior to joining Apple, she spent 6 years at Palm, building that wireless technology group from ground up and became the Vice President of Wireless Software Engineering. Prior to Palm, Isabel held key technical and managerial positions at other wireless companies such as AirPrime (Sierra Wireless) and Philips Semiconductor.

Isabel holds an MBA from HAAS School of Business at UC Berkeley, and MSEE and BSEE from Simon Fraser University in Canada.

Isabel currently serves on the STEM Advisory Committee for NAF, is an industrial advisor for UC Berkeley and is an advisor for Silicon Valley Chinese Wireless Association.

Isabel immigrated from China when she was sixteen years old; she is married with four young children.





## WiE learn together



**Safra A. Catz** is chief executive officer of Oracle Corporation and a member of the company's board of directors. She previously served as president of Oracle and has also served as the company's chief financial officer. Catz first served as Oracle's chief financial officer from 2005 to 2008, as executive vice president from 1999 to 2004, and as senior vice president from April to October 1999. She served on the board of directors for HSBC Holdings, one of the world's largest banking and financial services organizations, from 2008 to 2015.

## WiE work together



**Tsu-Jae King Liu** received her B.S., M.S. and Ph.D. degrees in Electrical Engineering from Stanford University. From 1992 to 1996, she was a Member of Research Staff at the Xerox Palo Alto Research Center. In August 1996 she joined the faculty of the University of California at Berkeley, where she is currently the TSMC Distinguished Professor in Microelectronics and Chair of the Department of Electrical Engineering and Computer Sciences at the University of California, Berkeley. Dr. Liu teaches and conducts research in the area of integrated-circuit devices and technology, and is a Fellow of the IEEE.



**Leyla Seka** leads Desk.com, Salesforce's all-in-one customer service app for fast-growing companies. Attracting some of the leading customer-oriented brands, Desk.com has become known as the savvy customer support app that empowers small businesses to deliver amazing customer experiences. Prior to leading Desk.com, Leyla was responsible for building and growing the Salesforce AppExchange, the world's leading business apps marketplace. In her six years managing the AppExchange team, she helped grow Salesforce's robust and innovative partner ecosystem of startups and ISVs who are building and selling the next-generation of enterprise apps. In her eight years at Salesforce, Leyla has held a variety of positions across product management, product marketing and business operations helping to build a scalable infrastructure to support the company's business. Prior to Salesforce, Leyla worked in product management and marketing organizations at Primavera Systems (acquired by Oracle), Evolve Software, Vivant and Eutron SPA. Leyla also spent two years in West Africa as a Peace Corps officer in Mali. Leyla holds a B.A. in International Relations and French from the University of California, Davis and an MBA from the Masagung School of Management at the University of San Francisco.



## Track 1: Leadership

[Location](#)

**1A Let it go! Finding the freedom to delegate** ENGR 327

Presented by: Claudia Galván

**9:45 AM - 10:45 AM**

**1B Emotional Intelligence** ENGR 331

Presented by: Tina Simms

**1C Women Leading in STEM: Decoding the Mystery** ENGR 340

Presenter by: Maria Hernandez, PhD

## Track 2: Communication

[Location](#)

**2A Effective Communication for Business Success** ENGR 329

Presented by: Rosie Zepeda

**2B The Art of Negotiation** ENGR 329

Presented by: Rosie Zepeda

**2C Assertive Communication** ENGR 333

Presented by: Jimma Cortes-Smith, MA  
Sara Strader, PhD  
Amanda Walters, PsyD

## Track 3: Professional Development

[Location](#)

**3A What's your market value?** ENGR 333

Presented by: Connie Bustillo

**3B Mentored for Success** ENGR 339

Presented by: Krystina Vasquez

**3C Entrepreneurship** ENGR 329

Presented by: Rosie Zepeda

## 1A Letting Go: Utilizing the Strengths of Others

**Presenter: Claudia Galván**

Technical Advisor, Early Stage Innovation

**Description:** Some people tend to micromanage, this often results in increased stress, lack of accountability and career limitations. There are best practices for effective delegation that produces a win-win result for all parties involved. In this fast paced presentation we will cover the following questions to finally help you **let go!** What keeps us from delegating, when and what to delegate, establishing trust and accountability.

## 2A Effective Communication for Business Success

**Presenter: Rosie Zepeda**

CEO, Compelling Conversations LLC

**Description:** In this workshop participants will learn the key components of human communication and how to apply it in business situations effectively.

## 3A What's Your Market Value?

**Presenter: Connie Bustillos**

Talent Acquisition

**Description:** Lots of people assume that you have to finish college to obtain market value or marketable skills. However, we start learning at 2 and start acquiring skills very fast that we can use in any career. Furthermore, learning time is never over. Learning and career making is a lifelong process that does not end with securing a job and staying there till you retire. Making an inventory of your **all** your skills will greatly help you understand your Personal Market Value.





*“It does not matter if you are a man or a woman,  
what matters is your **determination.**”* - Mika Duno

**11:00 AM - 12:00 PM**

**1B Emotional Intelligence**

**Presenter: Tina Simms**  
Network Process & Quality Manager, AT&T

**Description:** Oftentimes, college students enter the workforce uncertain how to effectively manage themselves among older, more experienced (though potentially less sophisticated) peers. Understanding the nuances of Emotional Intelligence better prepares a student for the realities of the workplace.

**2B The Art of Negotiation**

**Presenter: Rosie Zepeda**  
CEO, Compelling Conversations LLC

**Description:** In this workshop participants will learn the process to be an effective negotiator in everyday situations as well as in business.

**3B Mentored for Success**

**Presenter: Krystina Vasquez**  
Corporate Citizenship & Affairs Manager, IBM  
**Maya Pandya**  
Development Mngr. and Leadership Comm. Coach

**Description:** An interactive workshop where attendees will learn about leveraging mentors to achieve career success. Topics include what mentors are, why you need them, how to find one, and discussion points to bring up to maximize time spent with your mentor.

**2:00 - 3:00 PM**

**1C Women Leading in STEM: Decoding the Mystery**

**Presenter: Maria Hernandez**  
President & COO, Impact4Health

**Description:** A career in STEM brings some unique opportunities for continued growth and learning. It also provides opportunities to lead teams, lead initiatives, lead departments and yes, lead a company! As more companies begin to see the huge advantage women bring to the bottom line, learn ways you can be prepared to leverage the female advantage in leading. This workshop will share career strategies for success and key research on leadership for the 21st Century!

**2C Assertive Communication**

**Presenter: Jemma Cortes-Smith**, Educational Counselor, SJSU  
**Sara Strader**, Clinical Counselor, SJSU  
**Amanda Walters**, Postdoctoral Residency, SJSU

**Description:** Match your non-verbal communication with your inner assertiveness. Learn not only how to be assertive with your words but also your body language. Power-pose like Wonder Woman and be empowered!!

**3C Entrepreneurship**

**Presenter: Rosie Zepeda**  
CEO, Compelling Conversations LLC

**Description:** Entrepreneurship Workshop - With Silicon Valley being the heart of Innovation and Start Ups, it is necessary to also incorporate more women into this space. But what does it take to succeed as an entrepreneur? In this workshop, you will learn first and foremost about the mindset, the 3 basic personality traits and habits that you need in order to enter, survive and eventually succeed as an entrepreneur.



## Track 4: Climate Solutions

### 4A Water Sustainability

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

Location: **Clark 222**

**Description:** The recent drought in California has brought a new sense of urgency to the issue of water sustainability. This problem requires both technological advances and policy changes.

#### TOPIC #1 - Silicon Valley Advanced Water Purification Center in San Jose, California

Presenter: Angela Cheung  
Deputy Operating Officer, Santa Clara Valley Water Distr.

#### TOPIC #2 - Water Sustainability for Silicon Valley

Presenter: Katherine Oven  
Deputy Operating Officer, Santa Clara Valley Water Distr.

#### TOPIC #3 - Challenges of Future Water Supplies

Presenter: Nai Hsueh  
Board Member, Santa Clara Valley Water District

### 4B Alternative and Renewable Energy

Session Chair: Nicole Okamoto, Department Chair - Mechanical Engineering - SJSU

Location: **Clark 204**

**Description:** Continued reliance on fossil fuels to solve our energy needs will cause long-term problems. Not only are fossil fuels projected to eventually run out, but the burning of fossil fuels also causes a host of environmental concerns. This session will provide an overview on the use of renewable energy to help solve our long-term energy needs and will provide a specific focus on photovoltaic cells for energy production.

#### TOPIC #1 - Renewable Energy: The Time Is Now

Presenter: François Xavier Rongère  
R&D and Innovation Manager, PG&E

#### TOPIC #2 - Understanding the Structure Function Relationship in Photovoltaic Materials

Presenter: Laura Shelhas  
Post-doctoral fellow, SLAC National Accelerator Lab

### 4C Environmental Sensing from the Deepest Ocean to the Highest Atmosphere

Session Chair: Thalia Anagnos, AVP for Graduate & Undergraduate Studies - SJSU

Location: **Clark 202**

**Description:** Learn from several experts about how we use sensors and the data generated from them to understand our world .

#### TOPIC #1 - High Tech for the Deep Ocean

Presenter: Judith Connor  
Director, Monterey Bay Aquarium Research Institute

#### TOPIC #2 - Saving Lives Through Data Interoperability

Presenter: Kristin Tolle  
Director of the Data Science Initiatives , Microsoft

#### TOPIC #3 - Enabling Carbon Cycle Understanding

Presenter: Deb Agarwal  
Senior Scientist, Lawrence Berkeley National Laboratory





## Track 5: Foundational Technologies

### 5A 3D Printing and bioMEMS

Session Chair: Hyeran Jeon, Assistant Professor - Computer Engineering - SJSU

Location: ENGR 343

**Description:** 3D printing enables production of the functional components of machines, highly-customized consumer/industrial products that are one-of-a-kind and have complex 3D internal structures. Dr. Zhao will share her experiences and vision of the 3D printing. BioMEMS controls materials at the micron/nanometer scale to revolutionize the biological systems and the treatment of disease. Dr. Rogacs will introduce a portable sensor system for detection of trace amounts of toxic compounds in the food supply.

#### TOPIC #1 - 3D Printing: Art of Future Manufacturing

Presenter: Lihua Zhao  
Research Project Manager, HP Labs

#### TOPIC #2 - Towards Sensitive, Low-Cost and Field-Deployable Molecular Diagnostics

Presenter: Anita Rogacs  
Principal Research Scientist, HP Labs

### 5B Internet of Things / Sensor Networks

Session Chair: Xiao Su, Department Chair, Computer Engineering - SJSU

Location: ENGR 345

**Description:** Internet of Things (IoT) is the emerging technology innovation, which will enable connections among a big number of things, from wearables to cyber physical systems, from smart homes to critical infrastructure. Will IoT be the next big revolution or will it be transitional? In this session, the presenters will discuss what IoT is and the implementations of IoT in real world.

#### TOPIC #1 - GE Digital: Leading the Industrial Internet of Things (IIOT)

Presenter: Yun Freund  
Exe. Director, GE Digital

#### TOPIC #2 - IoT for Smart Cities

Presenter: Patti Robb  
Head of Strategic IP and Advanced Platform, Intel

### 5C Robotics

Session Chair: Winncy Du, Director, Robotics Lab, SJSU

Location: ENGR 341

**Description:** This section will focus on robotics technologies. Two industrial robot experts from the two most famous robot companies -- Adept Technology, Inc. (which focuses on industrial robots) and Intuitive Surgical Inc., will share their design and manufacturing experience in industrial and surgical robots, respectively. The 3rd speaker will give an overview of robot development, including history, major milestones, education, research, market, and trends.

#### TOPIC #1 - Industrial Robot Design – Past, Present, and Future

Presenter: Carl Witham  
Director of Mechanical Engineering, Adept Technology

#### TOPIC #2 - Development of the da Vinci Surgical System

Presenter: Melissa Lippiatt  
Manager Clinical Development Engineering, Intuitive Surgical, Inc.

#### TOPIC #3 - Robotics Competitions - Get out there and compete!

Presenter: Felicita Saiez, F.SWE  
President, Global Institute for Tech. & Engr.



## Track 6: Smart Cities

### 6A Cyber Security

Session Chair: Young Park, Assistant Professor - Computer Engineering - SJSU

Location: ENGR 341

**Description:** Cybersecurity is a critical global issue. Many organizations are targets of a dramatically increasing number of cyberattacks across a wide range of industries and geographies. A variety of factors are driving exposure of cybersecurity threats. In this session, we will discuss security issues and best practices to defend cyber attack.

#### TOPIC #1 - The Security Conundrum - Facing the Challenges

Presenter: Alison Wyatt - HPE  
Manager of Engineering, Enterprise Security Services

#### TOPIC #2 - Cybersecurity Preparedness and Response

Presenter: Jennifer Martin  
Director of Incident Response, Symantec

#### TOPIC #3 - VMware Distributed Network Encryption

Presenter: Suchreet Dhaliwal  
Manager, Security Products Group, VMware

### 6B Big Data

Session Chair: Birsan Sirkeci, Associate Professor - Electrical Engineering - SJSU

Location: ENGR 287

**Description:** The prevalence of the internet use has generated an unprecedented amount of data, i.e. big data. The data might come from social networks, e-commerce, GPS, sensors, and e-health, to name a few. Collecting and analyzing this data can generate new knowledge about human behavior under various conditions.

#### TOPIC #1 - Build a scalable ad delivery system

Presenter: Ning Li  
Engineering Director, Facebook

#### TOPIC #2 - Data Data Everywhere: Big Data and You

Presenter: Thomas Zimmerman  
Research Staff Member, IBM Almaden Research Center

### 6C Urban Mobility/Self-Driving Cars

Session Chair: Minnie Patel, Professor - Industrial & Systems Engineering - SJSU

Location: ENRG 343

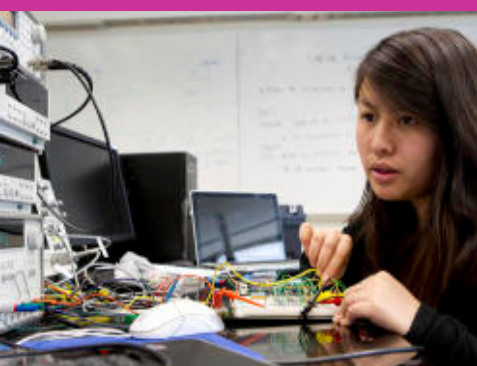
**Description:** Self-driving cars have many benefits and they can solve some of the problems of urban mobility such as better use of urban space, improved flow of traffic and nicer commutes, and technology without human error. A self driving car requires actuation — giving the car “the ability to control movement,” sensors, GPS capabilities, and logic. In this session, we will focus on how robotics and technology can be used to save lives, whether it be in the self-driving or the healthcare.

#### TOPIC #1 - Saving Lives Through Artificial Intelligence & Robotics

Presenter: Carol Reiley  
Entrepreneur

#### TOPIC #2 - Self Driving Cars

Presenter: TBD





## Track 7: Well-Being & Healthcare

### 7A Social Media for Social Good

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

Location: Clark 202

**Description:** Social media is a powerful tool to reach out to a large number of people in order to respond to emergencies, advance social causes, and support philanthropy. At the same time, social media generates a huge amount of Social Data which, when combined with the Open Data movement and analyzed using Big Data technologies, may have positive impacts for humanity. In this session we will discuss how Social media can be used for social good, both as a data source and as a communication technology.

#### TOPIC #1 - Social Media for Social Good

Presenter: Naomi Gleit  
VP - Product Management, Facebook

#### TOPIC #2 - Social Media and Open Data for Humanity

Presenter: Miyush Malik  
WorldWide Big Data Analytics Ctr. of Excellence Leader  
IBM

Presenter: Shilpi Agarwal  
Founder, Social Strategi

### 7B Personalized Learning

Session Chair: Peggy-Boylan-Ashraf, Assistant Professor, Aerospace Engineering - SJSU

Location: Clark 226

**Description:** This session is about how to build capacity in the field of personalized learning for creating and pioneering a sustainable ecosystem dedicated to advancing the state of learning data and learning analytics on behalf of all future engineers. How can the current data improve our engineer's learning?

#### TOPIC #1 - Innovate with Social Learning For a Better Tomorrow

Presenter: Kathy Bries  
Senior Director and General Manager of Learning, Cisco

#### TOPIC #2 - Personalized Learning and the Future of Education

Presenter: Caitlin Winner  
Design Manager of Education, Facebook

### 7C Precision Medicine/Neuroscience

Session Chair: Liat Rosenfeld, Assistant Professor, Materials & Chemical Engineering - SJSU

Location: Clark 222

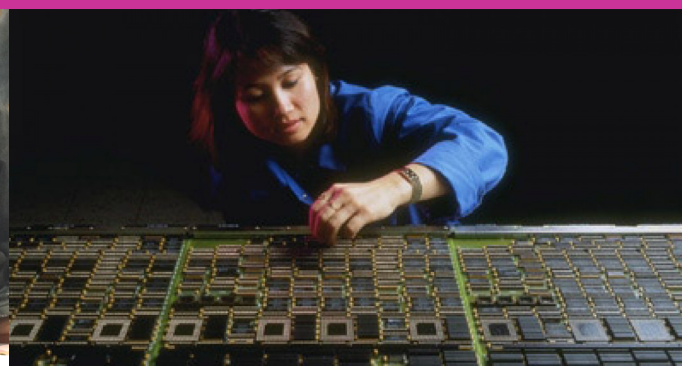
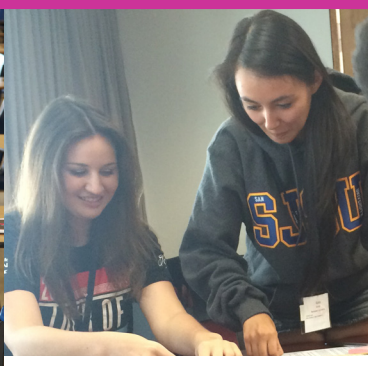
**Description:** This session involves two topics, neuroscience and precision medicine. For neuroscience, Prof. Andrea Goldsmith from Stanford University will talk about applying control, information, and communication theory to the area of neuroscience. In the second part of the session, Dr. Yuanyuan Xiao from Gilead Sciences will provide an overview of the drug development process and the application of biomarkers in different phases of drug development.

#### TOPIC #1 - Communications and Control Methods to Mitigate Neurological Diseases

Presenter: Andrea Goldsmith  
Professor, Stanford University

#### TOPIC #2 - Precision Medicine, Prospective from a Pharmaceutical Biostatistician

Presenter: Dr. Yuanyuan Xiao  
Associate Director of Biostatistics, Gilead Sciences

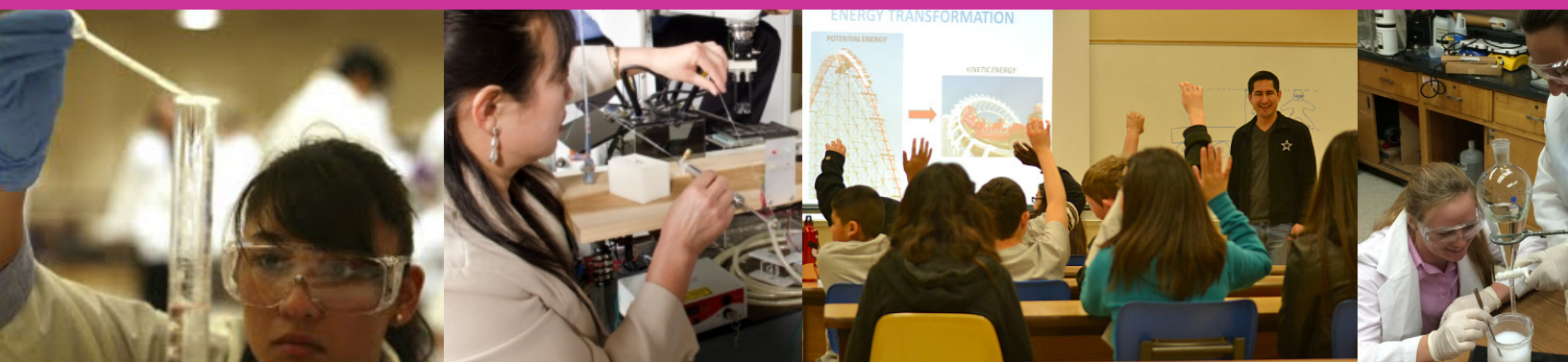




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| <p>★ <b>Engineering Building</b></p> <ul style="list-style-type: none"> <li>- Information Booth</li> <li>- Concurrent Sessions</li> <li>- Career Panels</li> </ul> | <p>★ <b>Student Union</b></p> <ul style="list-style-type: none"> <li>- All Meals (2nd Floor)</li> <li>- Reception (2nd Floor)</li> </ul> | <p>★ <b>Clark Hall</b></p> <ul style="list-style-type: none"> <li>- Concurrent Sessions</li> </ul> | <p>★ <b>Union Theater</b></p> <ul style="list-style-type: none"> <li>- Career Panel</li> </ul> |
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*“Logic will take you from A to B.  
IMAGINATION will take you everywhere!”*

-Albert Einstein





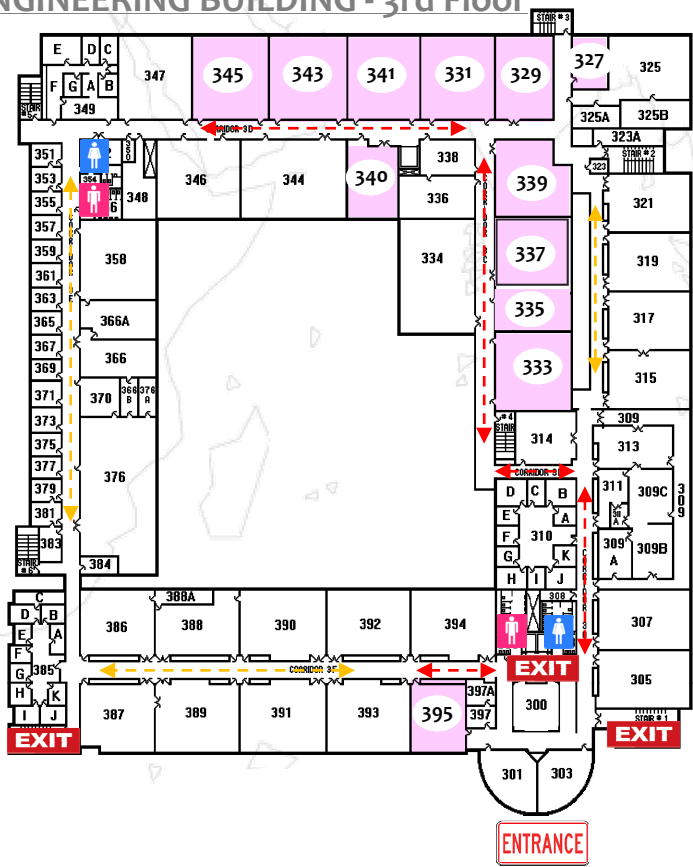
CLARK HALL - 2nd Floor



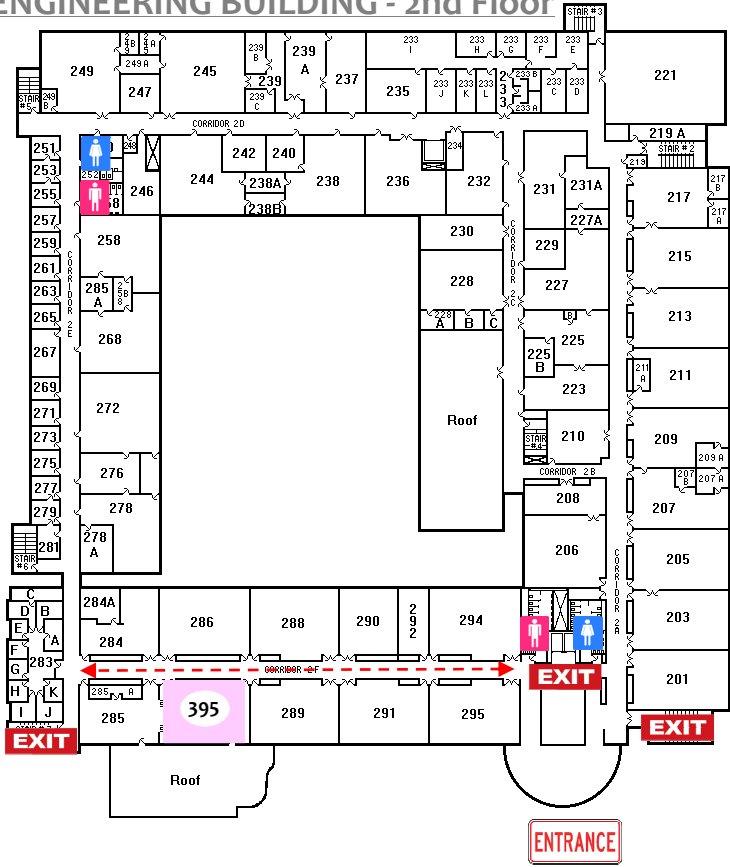
*"You got what it takes,  
but it will take  
everything  
you got!"*  
- Unknown

To Engineering Building  
&  
Student Union

ENGINEERING BUILDING - 3rd Floor



ENGINEERING BUILDING - 2nd Floor



|                 | Professional Development                                                       |                                                               |                                                                        |
|-----------------|--------------------------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------|
| 7:30-8:30 AM    | Registration & Continental Breakfast (Student Union)                           |                                                               |                                                                        |
| 8:30 -9:30 AM   | Opening Ceremony (Student Union Ballroom)<br>“Creating a Better Tomorrow”      |                                                               |                                                                        |
| Tracks →        | Leadership                                                                     | Communication                                                 | Career Advancement                                                     |
| 9:45 -10:45 AM  | (1A) ENGR 327<br>Let it go! Finding the freedom to delegate                    | (2A) ENGR 329<br>Effective Communication for Business Success | (3A) ENGR 333<br>What’s your Market Value?                             |
| 11:00 -12:00 PM | (1B) - ENGR 331<br>Emotional Intelligence                                      | (2B) ENGR 329<br>The Art of Negotiation                       | (3B) ENGR 339<br>Mentored for Success                                  |
| 12:15-1:45 PM   | Lunch Round Table Discussions (Student Union Ballroom)<br>“WiE Learn Together” |                                                               |                                                                        |
| 2:00-3:00 PM    | (1C) ENGR 340<br>Women Leading in STEM: Decoding the Mystery                   | (2C) ENGR 333<br>Assertive Communication                      | (3C) ENGR 329<br>Entrepreneur’s Mindset                                |
| 3:15-4:15 PM    | (Panel #1) ENGR 345<br>Information Technology                                  | (Panel #2) ENGR 331<br>Electronics & Biomedical               | (Panel #3) 287<br>Semiconductor Equipment, Aerospace, Renewable Energy |
| 4:30-5:15 PM    | Reception (Student Union)                                                      |                                                               |                                                                        |
| 5:15-7:30 PM    | Gala Dinner (Student Union Ballroom)<br>“WiE Work Together”                    |                                                               |                                                                        |



## Emerging Technologies

### Keynote Talks:

“Environmental Solutions,” Lisa Alvarez-Cohen, Professor, Civil & Environmental Engineering, UC Berkeley  
 “Wireless Innovation...Making a Difference in the World,” Isabel Mahe, VP of Wireless Technologies, Apple

### Climate Solutions

### Foundational Technologies

### Smart Cities

### Well-being & Healthcare

**(4A) Clark 222**  
 Water Sustainability

**(5A) ENGR 343**  
 3D Printing/  
 bioMEMS

**(6A) ENGR 341**  
 Cyber Security

**(7A) Clark 202**  
 Social Media for  
 Social Good

**(4B) Clark 204**  
 Alternative &  
 Renewable  
 Energy

**(5B) ENGR 345**  
 Internet of Things/  
 Sensor Networks

**(6B) ENGR 287**  
 Big Data

**(7B) Clark 226**  
 Personalized  
 Learning

### Keynote Address: Safra Catz, CEO, Oracle Roundtable Discussions

**(4C) Clark 202**  
 Environmental  
 Sensing: From the  
 Deepest Ocean to the  
 Highest Atmosphere

**(5C) ENGR 341**  
 Robotics

**(6C) ENGR 343**  
 Urban Mobility/  
 Self-Driving Cars

**(7C) Clark 222**  
 Precision  
 Medicine/  
 Neuroscience

**(Panel #4) ENGR 339**  
 Buildings, Infrastructure  
 and the Environment

*“Once we accept our limits, **go beyond** them.”*  
 -Albert Einstein

Tsu-Jae King-Liu, Chair of Electrical Engineering & Computer Sciences, UC Berkeley

### Keynote Address:

“How to Succeed in Silicon Valley Without Losing Your Soul,” Leyla Seka, GM & SVP, Salesforce Desk.com

Panel

1

## Information Technology

ENGR 345

Chair: Xiao Su, Department Chair, Computer Engineering



**Joanna Guerrero**  
Senior DevOps Engineer  
VMWare



**Nandini Kappiah**  
Software Engineering Manager  
Google



**Erica Lockheimer**  
Sr. Director of Growth  
Engineering and Women In Tech  
LinkedIn



**Belinda Wong**  
Director of Product  
Management  
Salesforce

Panel

2

## Electronics & Biomedical

ENGR 331

Chair: Dr. Stacey Gleixner, Chief of Staff for SJSU President/Interim AVP, SJSU



**Lesley Brown**  
Chief Diversity Officer  
HP



**Shan-Shan Chen**  
Senior Director  
Gilead Science



**Kavitha Prasad**  
Engineering Director  
Xilinx



**Patti Robb**  
Head of Strategic IP and  
Advanced Platforms  
Intel

"By learning to create technology,





Panel

3

## Semiconductors Equip., Aerospace, Renewable Energy

ENGR 287

Chair: Dr. Nicole Okamoto, Department Chair - Mechanical Engineering



**Sarah Marx**

Mechanical Engineer  
Lockheed Martin



**Kathryn Gosselin**

Assistant Professor  
San Jose State University



**Lena Nicolaides**

VP & General Manager  
KLA-Tencor



**Ellie Yieh**

Corporate Vice-President  
Applied Materials

Panel

4

## Buildings, Infrastructure & the Environment

ENGR 339

Chair: Dr. Laura Sullivan-Green, Professor - Civil Engineering



**Amy Fowler**

Senior Project Manager  
CH2M Hill



**Nai Hsueh**

Board Member  
Santa Clara Valley Water District



**Heather Manders Torres**

Civil Engineer  
City & County of San Francisco



**Caroline Pineda**

Civil Engineer  
CA Dept. of Transportation

girls learn to **speak up.** -Regina Agyare







**Dr. Deborah Agarwal** is a Senior Scientist and the Data Science and Technology Department Head at Lawrence Berkeley National Laboratory (LBNL, <http://dst.lbl.gov>). Her current research focuses on developing computational tools to enable scientists to more effectively organize and use their data to understand and mitigate climate change.

She has worked on projects involving watershed understanding, tropical forests, soil carbon, carbon capture, and satellite data. Dr. Agarwal earned her BS in Mechanical Engineering. Her MS and PhD are in Computer Engineering. Dr. Agarwal's career has taken her around the world; in addition to consulting at the United Nations in Vienna, she has traveled to India, Japan, and Taiwan, and spent a year working in Rennes, France, on sabbatical at Inria as an International Chair. Dr. Agarwal is committed to increasing diversity in computing, and is involved in mentoring programs to help underrepresented groups succeed.



**Shilpi Agarwal** is a Social Business Intelligence Evangelist, Social Data Analyst, Social Growth Hacker, Speaker and Startup Advisor who believes 'Your audience is your biggest asset'. She leads Social Strategi, a Social Data Agency that offers Social Audience Insights to help Brands understand and maximize on Social Data without

investing in expensive data, tools or hiring in-house Data Scientists. Her mission: Help Organizations Outsource Business Intelligence. Get Actionable Insights. Save Money. She hosts a weekly podcast called 'The Social CMO Show'. She started 'The Social Business School' to help people understand how Social Data can be leveraged for Business Intelligence to propel Growth. In 2015, Social Media Today called her 'Social Business Professional on the move' for her contributions to Social Business. She volunteers her spare time at non profits like American Society of Engineers (ASEI).



**Dr. Thalia Anagnos** is the Associate Vice President of Graduate and Undergraduate Programs at San Jose State University. As an SJSU professor for 30 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. Her professional contributions include Past-President of the Earthquake Engineering Research Institute and co-Leader of Education, Outreach, and Training for the Network for Earthquake Engineering Simulation.



**Dr. Peggy Boylan-Ashraf** is an Assistant Professor of Aerospace Engineering at San Jose State University. Her research lies at the intersection of Aerospace Engineering Structures and the scholarship of teaching and learning. Prior to joining the faculty at San Jose State University, she joined Stanford University as a postdoctoral researcher. Dr. Boylan

-Ashraf actively researches on new paradigms, particularly in the impending opportunities and challenges in understanding the orders of magnitude of data generated as engineering education transitions into digitally enabled teaching and learning. Improving engineering by improving its students has been her lifelong commitment.



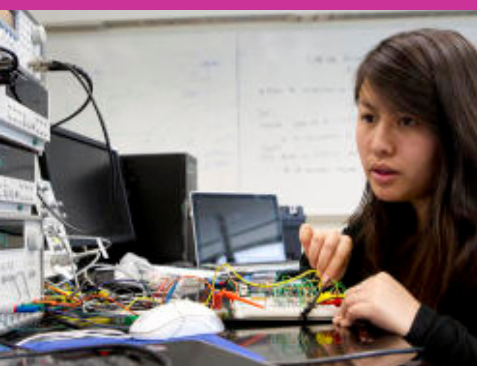
**Kathy Bries** is the senior director and general manager of Learning@Cisco, an award-winning education service focused on breakthrough technology for knowledge and learning solutions. Bries is responsible for developing and bringing to market Cisco Collaborative Knowledge, a new digital workplace solution. She also directs Learn-

ing@Cisco's operations, IT infrastructure investments, and overall profit-and-loss management. Bries brings more than 20 years of networking market knowledge, business unit product and engineering management, operations support, and cross-team project leadership to her position.



**Lesley Slaton Brown** was recently awarded the 2016 Woman of the Year in Technology by Silicon Valley's Chapter of National Coalition of 100 Black Women, Inc. (NCBW). She was recognized by *Black Enterprise* as a leading executive and a highly influential woman in corporate America and she serves on the Media and Mar-

keting Advisory Council for the National Action Council for Minorities in Engineering (NACME). Formerly with Hewlett Packard Global Marketing and Operations, Lesley rejoined HP in Sep-





tember 2015 as the Chief Diversity Officer. Lesley is responsible for leading HP's global Diversity & Inclusion strategy, programs, partnerships, reporting, and operations. Their goal is to connect all employees worldwide to internal communities that help them contribute, learn and thrive, and that each and every one of HP's 50,000 employees play a role in embedding diversity and inclusion into the DNA of the company. She's an expert in cross-functional alignment, integration, and building tech strategy, particularly in growing diverse markets and increasing representation of underserved groups in STEM and computing education and careers. Lesley is a graduate of Boise State University and her office is based in Palo Alto, CA.



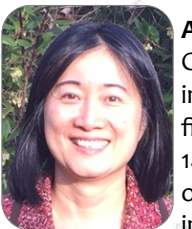
**Connie Bustillo** has more than 10 years of full-lifecycle recruiting/sourcing experience for both Fortune 500 companies and startups. She started her career as a Software Engineer at Apple Computer Inc. For a while she vacillated between engineering and recruiting, finally embracing recruiting 100%.

*"Optimism is the faith that leads to achievement. Nothing can be done without hope and confidence."*

—Helen Keller



**Shan-Shan Chen** is a Senior Director leading the biostatistics team in the HIV therapeutic area at Gilead Sciences. She has 30-year experience in pharmaceutical industry including 15 years with Gilead Sciences, one of the largest biotech companies in the country. During her tenure at Gilead, her team supported the market approval of several leading HIV products along with the only pre-exposure prophylaxis treatment for prevention. She received her MPH in Biostatistics from U.C.L.A.



**Angela Cheung** is the Deputy Operating Officer of the Water Utility Operations and Maintenance Division at the Santa Clara Valley Water District. Her current duties include oversight for operations and maintenance of the district's 3 drinking water treatment plants, an advanced water purification center, a state-of-the-art water quality laboratory, a well field, a pump station jointly owned and operated with the San Francisco Public Utilities Commission, 3 pumping plants, 140 miles of large transmission pipelines and 400 acres of groundwater recharge ponds. Ms. Cheung has over 25 years of experience in water resources engineering in both the private and public sectors. She earned a B.S. in Civil Engineering from California Polytechnic State University, San Luis Obispo and a M.S. in Environmental Engineering from the University of California at Berkeley. She is a registered civil engineer in California and has a chief operator license from the Division of Drinking Water.



**Jimma Cortes-Smith**, MA is an alumna of the SJSU MA Counselor Education program. A mentor gave her an opportunity to teach a GE course, EDCO 004, Personal, Academic and Career Development and since recently celebrated her 10 year teaching anniversary. In 2013 she began as a temp with SJSU Counseling and Psychological Services as an Educational Counselor. In January 5th she celebrated her 1 year anniversary as a 12 month Educational Counselor. She believes all the resources presented today can support you. If you take away one thing from this experience is to BUILD CONNECTIONS & BE OPEN MINDED TO OPPORTUNITIES.



**Dr. Judith Connor** earned her PhD from the University of California at Berkeley with dissertation research conducted in Panamá. She was a post-doctoral fellow at Hopkins Marine Station of Stanford University. Connor has explored the ocean from research vessels and Hydrolab, using scuba, "womanned" submersibles, and undersea robots. She has participated in expeditions off the coasts of all the continents, including as a science diver under the ice (six meters thick) in Antarctica. As a member of the senior management team at the Monterey Bay Aquarium Research Institute (MBARI), Connor directs the institute's communications, deep-sea video analyses, and technology transfer.



**Suchreet Dhaliwal**, a Silver medalist from Punjab Engineering College, Chandigarh (India), completed her Masters in Software Engineering (specializing in Networks) from San Jose State University, CA. She worked for the Network Software And Systems Technology Group on Cisco's next generation Operating System - NXOS. Currently, she manages Network Security Testing at VMware.







**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.



**Dr. Magdalini Eirinaki** is an Associate Professor at the Computer Engineering Department. She got a Ph.D. in Computer Science (Informatics) from the Athens University of Economics and Business in Greece. Her research revolves around recommender systems and more specifically in integrating various sources of information such as social data, opinions etc. to make the recommendation process more personalized and has several publications in refereed conferences and journals. As a female, she is very passionate about attracting more women to the fascinating world of Computer Science and Computer Engineering.



**Amy Fowler** is a Professional Civil Engineer with over 33 years of broad, interdisciplinary experience in water resources management, in both the public and private sectors. She is well regarded for fostering collaborative working relationships with diverse interests. Amy earned her B.S. in Civil Engineering from San Jose State University, and her M.S. in Civil Engineering from Stanford University.



**Dr. Yun Freund** is Executive Director of Engineering at GE Digital, San Ramon, California. She has been with GE for over 3 years and she leads a product engineering team for GE Digital Industrial Internet Application organization. She is also the Head of the Engineering for GE Digital India Software Organization. Prior to GE, she worked at Cisco on its Cloud Service Platforms including Platform as a Service (PaaS) and Infrastructure as a Service (IaaS) offerings for large enterprise and service providers. Yun has taught graduate computer science courses for 3 years at San Jose State University as Adjunct Professor. Yun has a PhD in Computer Science.



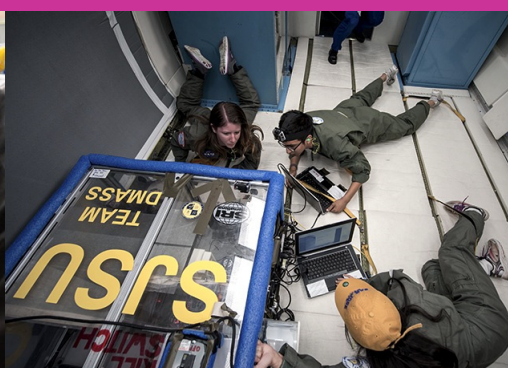
**Claudia Galván** has led product development at Oracle, Adobe and Microsoft reaching billions of people around the world. In the last few years she has focused on helping startups in Silicon Valley launch products internationally. Claudia is a community leader empowering women and Latinos in STEM. She is a former president of the Society of Women Engineers in Silicon Valley, former Sr. Director at the Anita Borg Institute, Board Member at Notre Dame High School and mentor at the TechWomen program. She is currently a part time Doctoral Student at Drexel University. She has been recipient of many awards including Silicon Valley Women of Influence in 2015.



**Dr. Stacy Gleixner** received her bachelor's degree in Material Science and Engineering from MIT and her Ph.D. degree in Materials Science from Stanford University. Since then, she was a Biomedical, Chemical and Materials Engineering professor at SJSU until 2014 when she took on her present position as Chief of Staff for President at SJSU. She also serves as interim Associate Vice President for Student Academic Success Services.



**Dr. Andrea Goldsmith** is the Stephen Harris Professor of Electrical Engineering at Stanford University. She also co-founded and served as CTO of Wildfire.Exchange and of Quantenna Communications. Dr. Goldsmith's awards include IEEE Fellow, the IEEE ComSoc Armstrong Achievement Award, Achievement Awards in Communications Theory and in Wireless Communications, the National Academy of Engineering Gilbreth Lecture Award, and the Silicon Valley/San Jose Business Journal's Women of Influence Award. She is author of 3 textbooks including "Wireless Communications" and an inventor on 28 patents. She participates actively in the IEEE Information Theory and Communications Societies including as a Distinguished Lecturer and Board of Governors member. At Stanford she chaired the Faculty Senate in 2009 and now serves on its Budget Group, Committee on Research, and Task Force on Women and Leadership. She received her Ph.D. in Electrical Engineering from U.C. Berkeley.







**Naomi Gleit** is Vice President of Product Management for Social Good at Facebook. As one of the first employees at Facebook, she has worked on almost every major initiative at the company including the internationalizing of Facebook into 80+ languages. Naomi currently leads a number of teams, including Social Good, where she focuses on helping the 1.5B people on Facebook do more good in the world. Naomi graduated from Stanford University with a degree in Science, Technology, and Society having written her thesis on Facebook.



**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, evidence-based techniques.



**Joanna Guerrero** has been a part of the technical industry for almost 20 years. As a software engineer for IBM, she was with the company nearly 16 years and held multiple positions, including being responsible for build and release processes of IBM's Bluemix database management products. She recently transitioned to VMware, a company that provides cloud and virtualization software and services, as a senior DevOps Engineer. Joanna currently serves as Chair of the SJSU MEP Industry Advisory Board and Industry Advisor to the Society of Women Engineers, one of three MEP affiliate student organizations.

Joanna 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, where she became an MEP alum. She has a Master's degree in Software Engineering from San Jose State University.



**Dr. Maria Hernandez** is President and Chief Operating Officer of Impact4Health, a California firm focused on healthcare innovations, strategy, and community engagement to address healthcare disparities. Impact4Health, LLC is the lead consulting firm for Phase 1 of the Alameda County Pay for Success Asthma Initiative. Maria also serves on the Board of Trustees for Alameda Health System and is a Board of Director for AAA. A first generation Latina, Maria was born and raised in Southern California and a graduate of the University of Texas. She also co-founded LatinaVIDA a nonprofit dedicated to inspiring the next generation of Latina Executives.



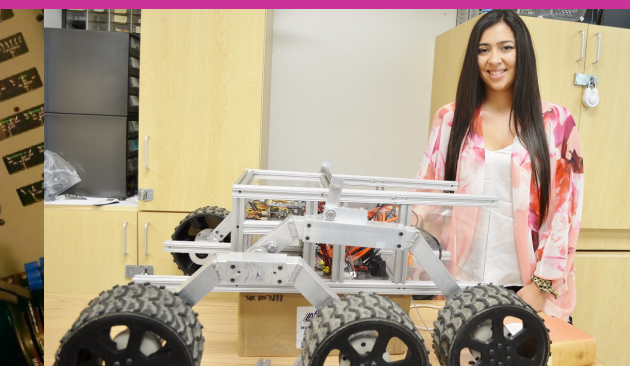
**Nai Hsueh** completed a B.S., Agricultural Engineering, National Taiwan University M.S., Mechanics and Hydraulics, University of Iowa Registered Professional Civil Engineer, California Worked for Santa Clara Valley Water District from 12/1977 to 12/2008 and retired as its Chief Operating Officer responsible for capital improvement program.



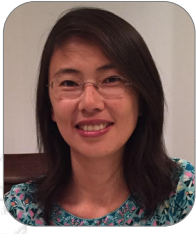
**Dr. Hyeran Jeon** is an Assistant Professor at the Computer Engineering Department. Her research interests include reliable and energy efficient throughput processor design, software and hardware interaction, and emerging memory and storage systems design. She earned her Ph.D. at the University of 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.



**Nandini Kappiah** is an engineering manager on the Android Location and Context team where she and her teams work to bring semantic location and contextual experiences to Android. Prior to her role in Android, Nandini led the anti-abuse team which focused on Google+, Hangouts and many other consumer products across Google. She has a master's degree in Computer Science from the North Carolina State University, Raleigh. She has worked as a software engineer at Google since 2005.







**Ning Li** received her BS in Computer Science from Zhejiang University in 1998 and her MS in Computer Science from Indiana University, Bloomington in 2000. After working for IBM Almaden Research Center as a software engineer for 8 years, she joined Facebook in 2009. She now serves as Engineering Director

at Facebook.



**Melissa Lippiatt** is a Manager of Clinical Development Engineering at Intuitive Surgical, where she works on the da Vinci Surgical System advancing minimally invasive robotically assisted surgery. Melissa has a Bachelor's degree in Mechanical Engineering from UC Santa Barbara.



**Piyush Malik** leads the Worldwide Big Data Analytics Center of Excellence within IBM's Global Strategy & Analytics consulting practice focusing on data-driven business transformation and data science. He was recently inducted into IBM Academy of Technology, a select group of top technologists across IBM. With 25 years of

Management Consulting background, he focuses on emerging technologies and strategic initiatives at IBM and for clients across geographies spanning multiple industries. He received undergraduate degree in electronics and communications engineering and a masters in management of technology from Indian Institute of Technology, Delhi. Piyush believes in social giveback and community building thus has been serving on the boards of a number of professional and non-profit organizations for many years and was recently appointed as the President of American Society of Engineers (ASEI) in silicon valley.



**Erica Lockheimer** has held the role of Sr. Director of Engineering at LinkedIn for 5 1/2 years. She leads the engineering team focused on increasing growth in new members and deepening engagement with current members. She is also responsible for LinkedIn's Women In Tech (WIT) initiative that is focused on empowering women in technical roles at the company. In 2014 and 2015, Erica was named one of the top 22 women engineers in the world by Business Insider. A veteran ambassador with the TechWomen international exchange program and a judge for the Technovation competition for teenage girls, Erica is a sought-after mentor to other women building careers in the software engineering and technology fields. A San Francisco Bay Area native, she is a graduate of San Jose State University with a B.S. in Computer Engineering. She is married and has two children who keep her busy!



**Heather Manders Torres** is a Civil Engineer working in the structural design section of the Engineering Management Bureau at the San Francisco Public Utilities Commission (SFPUC). She has worked as a designer and project engineer for large water infrastructure projects under the WSIP Program (Water Infrastructure

Improvement Program), mainly on projects related to the seismic upgrade of water transmission pipelines. Heather is currently acting as project engineer, managing the design of the seismic upgrade of primary wastewater treatment facilities at the Southeast Wastewater Treatment Plant in San Francisco under the Sewer System Improvement Program (SSIP). Heather received her B.S. in Civil Engineering and M.S. in Civil Engineering, with a concentration on Structural Engineering from U.C. Davis. Heather lives on the SF Peninsula with her husband and two young sons.



**Jennifer Martin** is the Director of Incident Response & Investigations in Symantec's Global Security Office, where she oversees the incident response program. She previously worked as an attorney in Symantec's Legal Department. She has worked for over a 15 years at the intersection of law and technology as a policy-maker, prosecutor, consultant, and in her current role. From 1999-2004, Ms. Martin was a Senior Counsel in the US Department of Justice's Computer Crime Section, where she focused on the international aspects of cyber crime and investigated numerous domestic and international cyber crime cases. Prior to joining Symantec, Ms. Martin was a Managing Director at a global cyber security consulting firm, where she was responsible for managing numerous data breach, computer intrusion, and thefts of IP matters. In addition to a law degree, Ms. Martin has a MS in Mathematics.







**Sarah Marx** graduated in May of 2014 from Purdue University with a degree in Aeronautical and Astronautical Engineering (AAE). At Lockheed Martin she works as an analyst, providing both thermal and structural analysis to programs who request assistance. Ms. Marx says, "It's a very challenging but fun job and I am continuously learning." In her free time she likes to go to the gym and play sports.



**Dr. Nicole Okamoto** did her BS at Calvin College and MS and Ph.D. in Mechanical Engineering at the University of Illinois at Urbana-Champaign. She taught at Baylor University for several years before moving to SJSU in 2001. She teaches courses in the thermal sciences and does research in the cooling of electronics and modelling and experimental testing of thermal components. She is very interested in developing new methods to improve student success, and she currently serves as Chair of the Mech. Engr. Department.



**Katherine Oven** is the Deputy Operating Officer of the Water Utility Capital Division at the Santa Clara Valley Water District. Her current duties include oversight for the planning, design, and construction of capital projects for the District's \$2.3 billion Water Supply Capital Program, and preparing the annual update of the District's Five-Year Capital Improvement Program (CIP). Ms. Oven has over 30 years of experience in water resources engineering in both the private and public sector and has been at the District for 13 years. She earned a Bachelor's degree in Civil Engineering from Santa Clara University and a Master's degree in Civil Engineering from the Massachusetts Institute of Technology. She is a member of the American Society of Civil Engineers and a registered engineer in the State of California.



**Maya Pandya** is a Development and Test manager for IBM. She is a high-energy leader with nearly 15 years of experience developing and supporting Enterprise systems. She loves to solve big problems and learn new technologies. She has served in various roles in the Tech industry including partner management, customer support, and product development.

As an Assistant Lecturer at the UC Berkeley-Haas School of Business and a certified Executive Coach, her focus is to help people find their authentic selves and improve their interpersonal communications. She has taught workshops to MBA students and corporate executives around the world. She is an active volunteer as a youth mentor, tutor, and community organizer. She is a founder of FremontSIP, a parents group committed to enhancing Fremont public school's Spanish Dual Immersion program - partnering with parents, district staff, and the school board to effect change. She received her MBA from UC Berkeley Haas School of Business and a B.S. in Computer Science and Engineering from UC Davis. Most important of all, she is mother to an awesome 9 year old girl who inspires and challenges her daily.



**Dr. Younghee Park** is an assistant professor in Computer Engineering of San Jose State University. Before joining this department, she was a post-doctoral researcher in the University of Illinois at Urbana-Champaign. She was also a post-doctoral research scientist in the Computer Science at Columbia University in New York City in 2011. She received her Ph.D. in Computer Science from North Carolina State University in 2010. Her main research is network and system security with an emphasis on malware detection, insider attacks, botnets, traceback to detect attacks. Currently, she is focusing on security issues in Smart Grid, Software Defined Networks, Big Data, internet of Things. She has been a programming committee or session chair for many peer-reviewed IEEE conferences. She holds the Kordestani Endowed Chair in the College of Engineering at SJSU in 2016.



**Caroline Pineda** graduated from SJSU with a Bachelors degree in Civil Engineering in 1991 and a Masters Degree in Civil Engineering in 1995. She is a Registered Professional Engineer in CA. Currently works for Caltrans - Office of Design. She is the South Oversight Project Engineer for Highway 85, 101, and 237 Express Lane Projects, and East Campbell Avenue Portals. Previously worked for the City of Santa Cruz Traffic and Storm Water Divisions and a private civil engineering firm.

*"A Woman with a voice is by definition a **strong woman**."* - Belinda Gates







**Dr. Minnie H. Patel** is a Professor in the Department of Industrial & Systems Engineering at San Jose 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 Jose State University in 2002.



**Dr. Jinny Rhee** is currently the associate dean of the College of Engineering at SJSU. She joined SJSU in 2002 as a professor of mechanical engineering. She received a PhD in mechanical engineering from Stanford University in 1995.



**Patti Robb** is a visionary, high energy executive passionate about developing and shipping innovative products experienced in overcoming great technical and business challenges. Currently Head of Strategic IP and Advanced Platforms, Internet of Things Group as well as Android AP Platform Phones and Tablets GM at Intel, she has 18 years of experience creating innovative software platform solutions, as well as Multimode commercial wireless products.

Patti maintains relationships with AT&T, Verizon, Sprint, T Mobile, Ecosystem Partners and International Carriers and has 8 US patents pending.

*"If you want to achieve greatness  
stop asking for permission."*

– Unknown



**Kavitha Prasad** works at Xilinx in the role of Director for Memory products responsible for delivering SRAM and DRAM based solutions for FPGAs. Prior to joining Xilinx she worked at Intel for 13 years and held various positions in chipsets group and server development group. Kavitha holds a Master's degree in Electrical Engineering from SJSU. Outside of her work she likes to travel, read books and watch movies.



**Carol Reiley** is a roboticist crusader who dreams of everyone having a robot. She is an entrepreneur and recently cofounded an AI startup. Her previous works include underwater and industrial robotics at Santa Clara University, space satellites at Lockheed Martin, people detection at GE Research, and clinical development engineering as a consultant at Intuitive Surgical. She also authored and manufactured a children's book in 2015. She took a leave from her doctoral research in Computer Science at Johns Hopkins University. Carol received her M.S. degree in Computer Science at Johns Hopkins University in 2007 and her B.S. degree at Santa Clara University at Computer Engineering in 2004. She also spent a semester at Stanford University in 2008.



**Sarah Strader, PhD** is a Licensed Professional Clinical Counselor at San Jose State University and enjoys helping the students clarify and work toward their goals. She also teaches Psychology courses at Foothill College and works with clients in private practice. She specializes in working with Highly Sensitive people.



**Dr. Anita Rogacs** received her B.S. in Mechanical Engineering from San Jose State University, and M.S. and Ph.D. in Mechanical Engineering from Stanford University. At HP Labs she leads the Microfluidics and SERS research lab where she focuses on MEMS and NEMS device development for automated, field-deployable molecular diagnostics in the area of Life Sciences.







**François Xavier Rongère** is currently leading R&D and Innovation for PG&E Gas Operations. He was previously in the Energy Efficiency department covering a broad range of responsibilities from Emerging Technology to Product Development, Program Management and Customer Services. Before joining PG&E, François held

technical and management positions at the R&D Division of Electricite de France. In 2000, he established Easenergy Inc., EDF's venture organization in the USA detecting and partnering with start-up companies of the energy sector. In addition, he created a class about Alternative Energy Sources and a Master curriculum on Solar Energy and Battery Technologies at San Jose State University. He is a graduate of the Institut National Polytechnique de Grenoble in France.



**Dr. Liat Rosenfeld** is an assistant Professor in the Biomedical Chemical and Materials Engineering at SJSU. She received her Ph.D. in Chemical Engineering from the Technion, Israel Institute of Technology. Then she did a post-doctoral fellowship in the Chemical Engineering Department at Stanford University. Professor Rosenfeld's research activities involve complex fluids and complex

fluids interfaces; Interfacial dynamics and rheology, and Microfluidics for next generation medical, electromechanical and energy applications. Professor Rosenfeld is teaching Transport Phenomena, Unit Operations in Chemical Engineering and Kinetics and Reactor Design.



**Felicita Saiez** is President of the Global Institute for Technology & Engineering (GIFTE), an organization dedicated to elevating the status of women in the international technology and engineering workforce. She is a consultant in engineering management and process improvement, and an Adjunct Professor in Engineering at Ohlone College. Previously, Felicita was President & CEO of LICl, Inc. and Vice President, Software Engineering-eBusiness Connectivity at WorldRes.com. She has served as National Vice President of Education for the Society of Women Engineers (SWE) and President of the Silicon Valley Engineering Council (SVEC). She has a B.S. in Aerospace Engineering from Boston University and an M.S. in Operations Research from Stanford University. In 2013, Felicita received the national SWE Distinguished Service Award.

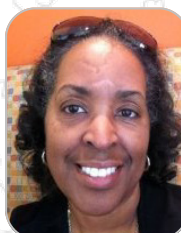


**Blanca L. Sánchez-Cruz** has served as the Assistant Director for Student Support Programs for the College of Engineering at San José State University since June 2012. In this role she has managed advancement and implementation of programs aiming to increase retention and graduation of specific undergraduate communities including, first-year, first-generation, and diversity students. Prior to joining the college she worked more than 10 years with low-income/first-generation college-bound high school students.

Ms. Sanchez-Cruz earned a MA in International Service from Roehampton University-London in 2008 and holds bachelors in Hospitality Management(2003) and Global Studies(2006) from SJSU.

*"Hope and curiosity about the future seemed better than guarantees. The unknown was always attractive to me... and still is."*

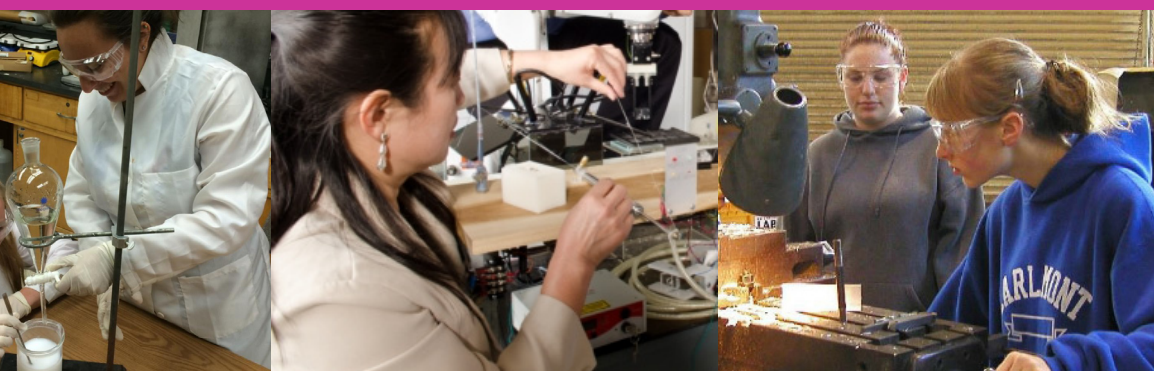
- Hedy Lamarr



**Tina Simms** is a Senior Network Process & Quality Manager for AT&T's Network Operation Construction and Engineering West Region. 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.

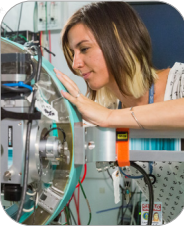
Tina Simms truly lives for the opportunity to assist others with tapping into their full individual potential.







**Dr. Birsen Sirkeci** is an associate professor in the department of Electrical Engineering at San Jose 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.



**Dr. Laura Schelhas** received her bachelor's degree in chemistry from Michigan State University in 2007. After, she started her PhD study under the guidance of Professor Sarah Tolbert at the University of California - Los Angeles. Her research focused on how one could control the nanoscale architecture of magnetic and multiferroic materials to tune their materials' properties.

*Never be satisfied with what you've achieved because it all pales in comparison with what you can achieve in the future.*

-Rabbi Nochem Kaplan



**Dr. Xiao Su** is Professor and Chair of Computer Engineering Department at San Jose 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 principle or co-principle investigator in multiple grants, from NSF, NASA and IT industry. She was a recipient of 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.



**Dr. Laura Sullivan-Green** obtained her Masters (2005) in Civil Engineering from Northwestern University and her Bachelors from the University of Dayton (Ohio) (2002). Her areas of research are in Geotechnical Engineering, Forensic Engineering, and Engineering Education. She is active in the Forensic Engineering Division of the American Society of Civil Engineers, where she focuses on bringing failure case studies into undergraduate education. Her engineering education emphasis is on bringing active learning models into the classroom. She is the co-Project Investigator for the \$3 million First in the World Grant awarded to SJSU, in partnership with CSU-Los Angeles and Cal Poly Pomona.



**Dr. Kristin M. Tolle** is the Director of the Data Science Initiative in Microsoft Research Labs. Since joining Microsoft in 2000, Dr. Tolle has initiated and managed several scientific research initiatives, from biomedical computing and environmental science, to more traditional computer and information science programs around natural user interactions and data management. She has successfully managed several critical research development projects such as the Microsoft Translator Hub and the Environmental Science Services Toolkit. Dr. Tolle is co-editor and author, of one of the earliest books on data science, *The Fourth Paradigm: Data Intensive Scientific Discovery*. Her current focus is on reducing time to scientific discovery by leveraging cloud-based advanced analytics and educating next generation data scientists.



**Kristina Vasquez** is the Corporate Citizenship and Corporate Affairs manager for IBM in Northern California and Montana. She is passionate about K-12 outreach, volunteerism, and diversity initiatives and is known for her willingness to give back to the community and foster collaboration among diverse teams. Kristina attended San Jose State University and graduated in 2002 with a BS in Computer Engineering. She has been with IBM since 1998 and has held jobs relating to computer programming, customer support, project management, and open source software integration. She has been active in INROADS, SHPE, WITI, SWE, IBM Technology Summer Camps, and has led numerous volunteer projects for various elementary schools in the area. She has 3 kids ages 12, 9, and 2.





*"Our greatest weakness lies in giving up.  
The most certain way to succeed is to  
always try one more time!"*

-Thomas Edison



**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 10 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 developing sustainability 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.



papers.

**Carl Witham**, the director of Adept Technology, Inc (one of top three robotics companies in US), received both his BS and MS in UCLA. He has participated in designing many industrial robots, such as SCARA, Six-axis, Parallel, Cartesian, mobile and customized robots. He holds several patents, and has published numerous journal



received her BS and MS in Civil Engineering from UC Berkeley.

**Belinda Wong** has experience working at Morrison Knudsen, Agilent Technologies, and Postini as well as Salesforce.com, where she is currently Product Manager for the Platform Cloud team in the San Francisco Bay Area. She has established a consistent history of delivering products and projects in the cloud computer and SaaS (software-as-a-service) business model. Belinda



**Alison Wyatt** is currently the manager of the software engineering team in Enterprise Security Services at HPE, managing a team of application and system developers responsible for building the tools and systems needed for ESS to deliver security services to its customers.

Alison graduated from Leeds University in 1996 with a degree in Mathematics and Statistics, and, after a period of South East Asia travel, began a career in software development. After moving back to the UK to be near family, she joined a managed services company specializing in Internet security. Alison was responsible for the development of customer facing systems, having ownership of feature enhancements and product lifecycle. Over the next few years her career progressed into management of a variety of teams including the research & development arm of security services.



**Caitlin Winner** manages the design team for Facebook's education initiative. Before joining Facebook in 2013, she founded a company in Berlin and built an app for sharing opinions. Caitlin is also an oil painter and amateur gardener. She graduated from Wellesley College with a degree in economics.



UC San Francisco.

**Dr. Yuanyuan Xiao** leads the Biomarker Biostatistics group at Gilead Sciences, and is responsible for the implementation and execution of biomarker analytical strategies across Gilead's therapeutic areas. Prior to Gilead, she was a Senior Scientist at Genentech and an Assistant Professor in the department of Biostatistics at



specializes in sexuality, anxiety, depression, and trauma.

**Amanda Walters**, Psy.D. earned her doctorate in psychology from the California School of Professional Psychology, San Francisco in 2015. She is currently completing her postdoctoral residency at Counseling and Psychological Services (CAPS) at San Jose State University. Dr. Walters enjoys working with and supporting the students. She



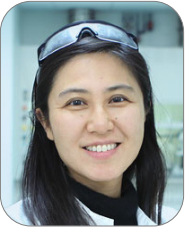




**Ellie Yieh** is corporate vice president for Advanced Product Technology Development at Applied Materials, Inc. She is responsible for the technical and operational excellence of the company's state-of-the-art Maydan Technology Center R&D lab and works closely with customers and business units to drive advanced product development and technology roadmaps.

Yieh joined Applied in 1989 as a process engineer in the Chemical Vapor Deposition (CVD) group and has headed several successful product developments over her 20-plus years with the company. She has held a variety of positions including product unit head of the Low k Dielectric Division and general manager of the Gap Fill, Etch, and Dielectric System and Modules business units. She has led her teams to deliver significant profitability and market share growth, build strong customer relationships, and develop industry standard technologies.

Yieh holds more than 90 semiconductor engineering patents and was named among the 2015 "Top 50 Most Powerful Women in Technology" by the National Diversity Council, and a 2010 "Women Worth Watching" by Profiles in Diversity Journal magazine. She holds a bachelor of science degree in chemical engineering from the University of California, Berkeley.



**Dr. Lihua Zhao** is a Research Project Manager, leading cutting-edge research on 3D print with HP's Multi Jet Fusion technology at HP Labs. She received her Ph.D. in Organic Chemistry and Materials Science from University of California, Irvine in 2006 and her B.S. and M.S. degree in Chemistry in China. Dr. Zhao joined University of California, Berkeley as an Assistant Research Scientist in 2006 and was invited to work at HP Labs as a visiting scientist. In Jan. 2009, she joined HP Labs and primarily focused on materials design and development as well as device fabrication for OLED flexible displays using roll-to-roll processed TFT backplanes for 4 years. She has published over 20 peer-reviewed papers and authored a number of conference papers and patent applications. She is a member of the American Chemistry Society, Material Research Society and Sigma Xi.



**Tom Zimmerman** is a Research Staff Member and Master Inventor at IBM Research—Almaden in San Jose, CA. He has over 30 years of experience exploring the frontiers of human-machine interaction. His 40+ patents cover position tracking, user input devices, wireless communication, image and audio signal processing, biometrics and encryption. His Data Glove invention established the field of Virtual Reality, selling over one million units. His electric field Personal Area Network (PAN) invention sends data through the human body, exchanging electronic business cards with a handshake, and prevents air bags from injuring children in cars. His passion for volunteering in the public schools earned him the California Medal for Service from Governor Arnold Schwarzenegger and First Lady Maria Shriver. He received his B.S. in Humanities and Engineering and M.S. in Media Arts and Sciences from MIT.



**Rosie "the Closer" Zepeda** is a Professional Speaker and CEO of Compelling Conversations, an organizational development training, diversity and conscious marketing consulting company ([www.compelling-conversations.com](http://www.compelling-conversations.com)). She is also the Founder of Latina Success Network, the premier global, member based community for culturally relevant professional, entrepreneur and self development for Latinas by Latinas ([www.latinasuccessnetwork.com](http://www.latinasuccessnetwork.com)). The first cohort of the LSN Start Up Academy graduates in 2015 and the LSN Communication Academy starts kicks of Oct. 2015.

She helps corporations, organizations, professional leaders and Start Ups find success by learning to strategically alter their language in order to effectively deliver the right message to their target audience for consistent business success, while also being representative, on a human capital level, of the communities that surround them. IBM, Oracle, Intel, Comerica Bank, are some of the companies she has worked with.

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.





## About the Charles W. Davidson College of Engineering:

The Davidson College of Engineering comprises 12 engineering disciplines in addition to General Engineering, more than 7,300 undergraduate and graduate students and approximately 260 faculty and staff members. It is the largest engineering program in the entire 23-campus California State University (CSU) system.

A hallmark of our success lies in a deep understanding that innovation never ceases. Through years of industry and technological advancements, the Davidson College of Engineering has continued to create new educational experiences that allow students to imagine and achieve endless possibilities. This means not just keeping pace with real-world trends and challenges, but also pioneering innovative teaching approaches and strategies that prepare students to drive the development of future solutions.

The Davidson College of Engineering has built a reputation not only for supporting the success of its students, but also for

instilling enthusiasm for engineering among youth, educators and community organizations across the greater San José area through many programs and campus-sponsored initiatives.

With top marks for quality, satisfaction and post-graduation job success, the Davidson College of Engineering takes pride in preparing graduates to be ready to perform on the job from day one and excel in our increasingly global economy. As society's workforce becomes more diverse, SJSU is also honored to be one of the nation's most ethnically diverse college campuses. Our faculty, staff and student body make up a vibrant community with a broad range of backgrounds and perspectives. Our unique position in the Bay Area also offers a gateway to higher education and an opportunity to make a difference in the lives of many. We believe our diversity and our respect for different experiences, viewpoints and approaches give our students an advantage as they enter the global workforce.

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*"Never doubt that a small group of  
thoughtful committed citizens can  
**change the world.**  
Indeed, it is the only thing that  
ever has."*

-Margaret Mead



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