INAUGURAL

Power of



Conference

**CHARLES W. DAVIDSON COLLEGE OF ENGINEERING** 

Saturday, March 21, 2015
7:30 AM—7:30 PM
San Jose State University

Event made possible by:

The Mark and Carolyn Guidry Women in Engineering Program



Welcome from Dean Hsu

My warmest welcome to the first annual Power of WiE (Women in Engineering) 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.

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ote women in engineering and their career success, and wish every-

one a successful conference.

Best regards,

# **Conference at a Glance**

7:30—8:30 AM	Breakfast & Registration	Student Union
8:30—9:15 AM	Opening Ceremony	Student Union
9:30—10:30 AM	Concurrent Session #1	Engineering Building
10:45—11:45 AM	Concurrent Session #2	Engineering Building
12:00—1:30 PM	Round Table Discussions Lunch	Student Union
1:45—2:45 PM	Concurrent Session #3	Engineering Building
3:00—4:00 PM	Concurrent Session #4	Engineering Building

#### **OPENING CEREMONY**

MC: Sophia Wendt, Senior

# **College of Engineering Welcome**

Dean Andrew Hsu

#### WiE Kick-Off

Stacey Gleixner

SJSU Chief of Staff

## **KEYNOTE GALA DINNER**

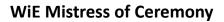
MC: Sophia Wendt, Senior

## **Keynote Address**

Punita Pandit Bingler

## **Many Thanks**

Sophia Wendt



**Sophia Wendt** 

Senior, General Engineering





WiE Kick-Off

**Dr. Stacey Gleixner** 

**Materials Engineering** 



**Closing Remarks** 

**Dr. Jinny Rhee** 

Mechanical Engineering



### **Punita Pandit Bigler**

BS Mechanical Engineering, 1987, MBA 1994

Co-Founder, Director of Operations
Equalia & Hoverboard Technologies

Punita Bigler opened the doors to Animatics Corporation in 1987, the same year she graduated with a Bachelor's degree in Mechanical Engineering from San Jose State. The idea was to turn a senior project into an automation company that would deliver Motion Control products that were more responsive to the needs of Engineers. The first products were released in 1989. A major breakthrough in the automation industry occurred in 1995 with the patented SmartMotor, recognized among the Best Products of 1995 by Design News.

Two years later, Animatics was named #212 of Inc. magazine's Fastest Growing Private Companies. Among its many awards and distinctions from leading engineering publications, Animatics won the Editor's Choice Award from Control Engineering, Product of the Year from Electronic Products, and the Excellence in Design Award from Design News. In 2002, the Silicon Valley Business Journal named Animatics its 19th fastest growing private company. By late 2008, Animatics had acquired three other companies and opened additional locations and regional offices in Rochester (NY), England, Germany and Japan. In May 2011, Punita and her co-founder sold Animatics to Moog Inc., a worldwide designer, manufacturer, and integrator of precision control components and systems. In 2012, Punita along with her Animatics co

# **Conference Presenters**



#### Jimma Cortes-Smith

Educational Counselor, SJSU Counseling & Psychological Services

Jimma Cortes-Smith graduated with her MA in Counselor Education from SJSU in 2001 and began teaching Personal, Academic and Career Development in 2004. During the past eleven years she has worked as a counselor and teacher within all tiers of education; K-12, community college and at the university level. Jimma has



#### **Reynado Gill**

CEO & Co-Founder, ReyLabs

Co-founder, Silicon Valley technologist with seven pioneer mobile and IoT Analytic of Things patents for distributed sensor network stream processing using "Devices as Peer Clouds." World-renowned Cloud Inventor



#### Joanna Guerrero, Comp. Sci. & MS - Software Engineering

Software Engineer, IBM

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 Masters degree in Software Engineering from San Jose State University. She is happily married to husband, Jesus Guerrero, whom she shares 4 children. As a software



#### Praveen Gupta, Electrical Engineer

Director of Corporate Quality - Prysm, Inc.

Praveen is the Director of Corporate Quality at Prysm, Inc, and an innovation evangelist and start up advisor on weekends. He received his BSEE and MSEE degrees in Electrical Engineering from IITs in India and Illinois.

Praveen has authored over a dozen of books in business management, and been an Editor-in-Chief of Interna-



#### Veronica Hand

Coordinator for Educational Programs - SJSU Counseling Services

Veronica Mendoza Hand currently works as the Coordinator for Educational Programs in the SJSU Counseling Services Department. As coordinator she organizes various workshops on topics such as time-management, study-skills, stress-management and more. In addition, she meets individually with students to help them to be academically successful.



#### Dr. Maria Hernandez

Co-Founder, LatinaVIDA

Dr. Maria Hernandez is President of Impact4Health, LLC a consulting firm focused on reducing healthcare disparities and improving healthcare outcomes among vulnerable populations. An active advocate for women in leadership roles across all sectors, Maria co-founded LatinaVIDA in 2013 as a nonprofit with a mission to inspire the next generation of Latina executives in every sector. She writes often about empowering women in



## Elspeth Mills, Psy.D.

Post-Doctoral Resident, SJSU Counseling Services

Elspeth Mills is a Post Doctoral Resident in the Counseling Services Department of San Jose State University. As a counselor Elspeth conducts individual and group therapy for SJSU students, as well as workshops and presentations.



### **Carlos Montesinos, Computer Engineering**

Researcher & Startup Programs Lead, Intel

Carlos Montesinos is a Researcher & Startup Program Lead focused on enabling IoT and Wearable startups. He leads a team of program managers and engineers who work really closely with inventors and entrepreneurs to develop connected products. His goal is to enable innovators to develop the next-big-thing with embedded platforms, from idea to manufacturing.



#### Lexi Ross

Software Engineer, Facebook

Lexi Ross is a software engineer at Facebook, where she works on the Pages Product Infrastructure team. Prior to joining Facebook, Lexi graduated from Harvard with a degree in Computer Science.



#### **Tina Simms**

Senior Network Process & Quality Management, AT&T

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 volun-

## **Conference Presenters**



#### **Amina Terfai**

Manager, LinkedIn

Amina started her career as a System Administrator at Sun Microsystems, supporting Solaris boxes in the IT Datacenter. 6 years later moved to a Sysadmin Job at Cisco Systems where she spent 3



#### Visali Venkata

LinkedIn, Sr. Database Engineer



#### Belen Verduzco, Civil Engineering

Superintendent, Turner Construction

Belen Verduzco joined Turner in 2003 after graduating from Santa Clara University with a BS in Civil Engineering. During her 12 years with Turner, she has worked on numerous exciting projects including Stanford Bing Concert Hall, Stanford Graduate School of Business, Safeway Corporate Headquarters, and various projects



#### **Brynn Watson**

Vice President of Engineering



Brynn Watson is the Lockheed Martin Space Systems Company (SSC) Vice President of Engineering Operations, leading over 5,800 engineers and ensuring effective and competitive people, processes, tools, technologies and services are applied to all Space Systems Company programs.

Previously, Ms. Watson was Director of Software Engineering responsible for the execution and strategic direction for the 1,200-strong software product workforce. She also led SSC's Digital

Tapestry strategic initiative, responsible for maximizing digital integration and end-to-end system



## Rosie "the Closer" Zepeda, Communications Master's in Education

CEO, Compelling Conversations LLC

After graduating from SCU, Rosie was accepted into Teach for America and taught for 5 years in disadvantaged NYC schools. She was a Reader's Digest Fellow. She recruited for 11 years in corpo-

# **Development Sessions**

#### **Assertive Communication**

Come to this session to learn how to be an assertive communicator. You will learn how to be assertive with your words but also with your body language. Learn some power poses and leave the workshop empowered!

### **Emotional Intelligence**

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.

#### **Effective Communication for Business Success**

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

## The Art of Negotiation

In this workshop participants will learn the process to be an effective negotiator in every day situations as well as in business.

### What Leads You?

All healthy human beings have an inner stream of thoughts and feelings that include criticism, doubt and fear. Thus, leaders stumble not because they have undesirable thoughts and feelings, but because they treat them like facts and avoid situations that evoke them.

Mindfulness is a way of paying attention to the present moment by noticing sensations, thoughts and emotions. By practicing mindfulness, an individual has the opportunity to observe their mind and release habitual mental patterns.

This session will offer participants the opportunity to practice mindfulness as well as learn tangible applications of mindfulness as it applies to leadership in the workplace.

Tracks:	Self A	wareness	& Developr	nent
7:30-8:30 AM		Regist	tration & Co	ntine
8:30 -9:15 AM			Opening	Cere
9:30 -10:30 AM	What Makes you Tick?	Effective  Communication for Business Success  (ENGR 345)	Women Leading in STEM! Decoding the Mystery (ENGR 339)	N <i>A</i>
10:45-11:45 AM	(ENGR 329) Leadership:		Men as Advocates for Women-	Linke
	What Leads You?	NA	A Real Win/Win!	Coac
	(ENGR 340)		(ENGR 339)	(ENGR
12:00-1:30 PM		Ro	und Table D	iscus
1:45-2:45 PM	Communicating	Emotional		Linke
	Assertively	Intelligence	NA	Coac
	(ENGR 340)	(ENGR 325)		(ENGR
3:00-4:00 PM	What Makes	Emotional	Women Leading in	The A
	you Tick?	Intelligence	STEM! Decoding the Mystery	Negoti
	(ENGR 329)	(ENGR 325)	(ENGR 339)	(ENGR
4:15-5:30 PM	Engineering Panel #1 Engineering Pa		Panel #2	
5:45-7:30 PM			Keynote (	Gala I

# **Tech Trends Talks Series**

Special

**Sessions** 

# ental Breakfast (Student Union)

# emony (Student Union)

R 333)	(ENGR 325)	(ENGR 341)	(ENGR 337)	(ENGR 285)
		Lockheed Martin	Passion for Success	
aches	Things	Engineering @	Pursuing Your	
kedIn	Internet of	Innovations in	Entrepreneurship:	PLTW Welcome
	(ENGR 303)	(ENGR 341)	(TBD)	
		Lockheed Martin	Everything	
NA	Revolution	Engineering @	Internet of	
	Hardware	Innovations in		

# ssions Lunch (Student Union)

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kedIn	Discussion:	Culture change	The Culture of	
aches	Humanoid Robots	required to imple- ment digital tapestry	Connecting the World	
R 333)	(ENGR 303)	(ENGR 341)	(ENGR 285)	
Art of	Hardware	Culture change	Leadership in	
otiation	Revolution	required to imple-	Environmental and	
		ment digital tapestry	Engineering Design	
R 345)	(ENGR 303)	(ENGR 341)	(ENGR 331)	
2	Engineering Panel #3		Engineering Panel #4	

# **Dinner (Student Union)**

# **Tech Trends Talks**

## **Discussion by Intel Labs**

#### How Wearables and IoT will Enable the Ultimate Appliance, Humanoid Robots

This is an open table conversation to explore how connected products can potentially enable Humanoid Robots, the ultimate appliance.

#### **Pursuing Your Passion for Success by Praveen Gupta**

A recent Los Angeles Times article about women leaving the technology field in droves presents opportunities for women to excel through entrepreneurship while pursuing their passion. There are many examples of successful entrepreneurs and business women. Based on extensive research, Praveen has developed methods for discovering your passion, identifying opportunities, productizing ones passion, and starting a business.

## The 99% Efficient IoT: Design for Sustainability

This session will focus on how the IoT will transform every industry and every career. It has the potential to become bigger than the consumer Internet. However, history shows that IT and security costs can quickly erode the potential business value. We must not make the same mistakes with the IoT. Learn how to design for a sustainable IoT to accelerate business value whether you are a civil, mechanical or software engineer. Everyone must be an IoT engineer.

## Culture Change required to implement digital tapestry by Lockheed Martin

## **Tech Trends Talks**

### Leadership in Energy and Environmental Design by Turner Construction

**Def:** The USGBC says that LEED defines "a nationally accepted benchmark for the design, construction and operation of high-performance green buildings" and "provides building owners and operators with the tools they need to have an immediate and measurable impact on their buildings' performance." In other words "LEED is an ecology-oriented building certification program that concentrates on improving performance across five key areas of environmental and human health: energy efficiency, indoor environmental quality, materials selection, sustainable site development and water savings. "

### The Hardware Revolution by Intel Labs

In this presentation we will share with the audience details about the democratization of hardware product development. This trend is transforming how IoT and wearable products are produced. We will also touch on Intel's rapid prototyping tools and how we are igniting the field.

## The Culture of Connecting the World by Facebook

In this session, we'll discuss life at Facebook: the day-to-day experience of building a product that connects over 1.4 billion people around the world. I'll talk about some of the key aspects of our culture that have allowed us to scale from a tiny startup to a company of 10,000, as well as my own experience working at Facebook as a software engineer. I'll also go through some of the latest trends in social media we're most excited about, such as connectivity in

## **Innovations in Engineering at Lockheed Martin**



Charlotte Belsick
THAAD Interceptor New Business
Lockheed Martin

Charlotte Belsick has worked for Lockheed Martin for over 25 years. Since 1991 she has

worked for Space Systems Company in Sunnyvale. Charlotte has served in a number of positions of increasing responsibility on a diverse set of programs covering the entire life cycle phases including the Chief Engineer for NASA space programs and the Chief Systems Engineer for the International Space Station. Prior to transferring to Space Systems, she worked at Lockheed Aircraft Company at the Kelly Johnson Research and Development Center. Charlotte's first job out of college was with McDonnell Douglas Aircraft Company in Long Beach. She had engineering internships in the nuclear and printer industries throughout college.

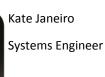
Charlotte graduated with a BSME from San Diego State University and a MSAE-Systems Engineering from CalPoly-San Luis Obispo.



Kristy Dalrymple
Systems Engineer

Kristy Dalrymple is the Certified Principle Engineer (CPE) for the GPS Receiver on P321. She is responsible for all tech-

nical efforts (subcontracted and in house) and is the technical liaison to the Customer, Program Management, and the Subcontractor for the GPSR. She successfully led efforts including a design review, various readiness reviews, anomaly resolution, and product certification for the GPSR. Kristy has delivered two flight GPSR units to P321. She is also on the CPE team for the Primary Communications Subsystem (PCOM) on P321. She is responsible for command and telemetry integration and testing for the PCOM subsystem, and has led several cross-functional investigations to support system-level integration.



Ms. Janeiro was born and raised in Rockville, MD and moved to California for

college. She earned her undergraduate degree in Mechanical Engineering at Stanford University, and her master's degree in Mechanical Engineering at Stanford University while working full time. Kate joined Lockheed Martin in March of 2014 and has participated in many aspects of satellite production including software development, test, fault analysis, launch support, test equipment design, subcontracts, and requirement development. She currently manages the Configuration and Data Management team for multiple satellite programs.



Reyna Morfin

Civil Engineering

Reyna Morfin grew up in the East Side of San Jose and graduated from W. C. Overfelt High Shool in 2008. She graduated from SJSU in 2014 with a BS in Civil Engineering. Currently, she is a Project Coordinator at South Bay Construction. Her projects consist of market ready tenant improvements. Reyna continues to learn to acquire further professional development as an



Nancy W. Nelson

General Manager, Trimble Navigation

Sometimes the indirect route is the best route of all. Nancy Nelson began studying math as an undergraduate at the University of New Mexico. When a professor advised her to be an

engineer, she thought, "no way would I ever want to do that!" Instead, she studied Psychology and Chemistry. However, after graduating she began working in the field of biomedical engineering and realized that engineering was mathematics based.

Looking for a change of pace and place, Nelson took a job at NASA-Ames and relocated to California. It was then that Nelson decided to return to school to obtain her engineering degree. While at San José State, Nelson attended a conference for the Society of Women Engineers (SWE) and was inspired by a woman engineer who worked in instrumentation and R&D. It became clear to her that she wanted to work in these areas as well.



Dr. Jinny Rhee Associate Dean

Dr. Jinny Rhee is the Associate Dean of the Charles W. Davidson College of Engineering at SJSU since 2014 and she oversees all aspects of

the undergraduate programs in the college.

From 2013-2014, she was the Director of Assessment and Chair of the Program Planning Committee of the Academic Senate and responsible for the annual assessment of all degree programs on campus, and the Chair of Program Planning. Both processes are required by the California State University system.

Jinny received promotion to full professor in the Mechanical Engineering in 2013, and tenure and promotion in 2008. She normally teaches courses in the thermal and fluid sciences area of mechanical engineering, as well as engineering mathematics and senior design project. Her interests include renewable energy, thermal management, and multidisciplinary education for students. She is also the Director of the newly established Renewable Energy and Energy



Joanna Guerrero
Computer Science

**Software Engineering** 



Praveen Gupta
Electrical Engineer

**Director of Corporate Quality** 



Carlos Montesinos Electrical Engineer

Research & Start-up Program Lead



Belen Verduzco

Civil Engineering

Superintendent



**Brynn Watson** 

Vice President of Engineering

# **Alumnae**

# Faculty/Staff



**Ana Castro**Electrical Engineering



**Dr. Thalia Anagnos**Professor
General Engineering



**Kathleen East**Electrical Engineering



**Dianne Hall** Lecturer



Melinda Mendolla
Chemical Engineering



Jared Tuberty
Executive Director



# **Many Thanks to Conference Presenters and Panelist**

Thalia Anagnos - College of Engineering A

Christina Anthony - Brocade

Charlotte Belsick - Lockheed Martin 🔺

Ana Castro - Alumna, TBD 🛧

Jimma Cortes-Smith, SJSU Counseling Services •

Krysty Dalrymple—Lockheed Martin ▲

Kathleen East - Alumna 🔺

Alya Elhawary - Lockheed Martin 🔺

Amanda Foo - Lockheed Martin 🛧 •

Reynaldo Gil - ReyLabs •

Stacey Gleixner - SJSU Office of the President •

Joanna Guerrero - IBM .

Praveen Gupta - Prysm, Inc. •

Dianne Hall– College of Engineering ▲

Veronica Hand - SJSU Counseling Services •

Maria Hernandez - LatinaVIDA •

Kate Janeiro—Lockheed Martin ▲

Vivienne Jordan—Lockheed Martin ▲

Melinda Mendolla - Kenetics 🔺

Elspeth Mills - SJSU Counseling Services

Carlos Montesinos—Intel Labs ▲•

Reyna Morfin - South Bay Construction 🔺

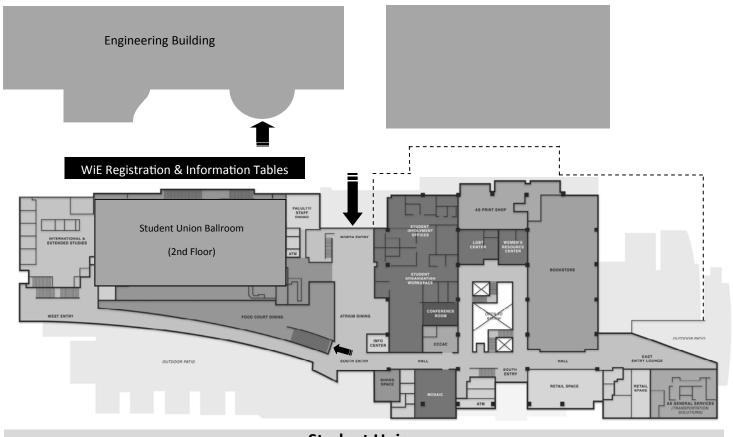
Nancy W. Nelson - Trinbel Navigation A

Lexi Ross - Facebook •

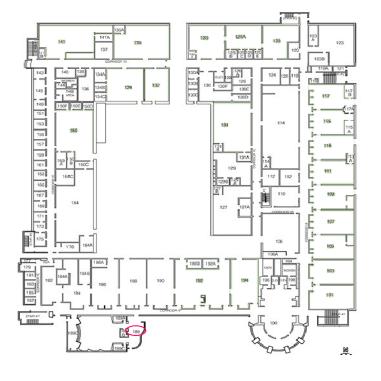
Tina Simms - AT&T •

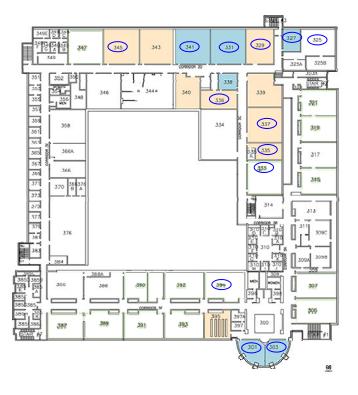
Amina Terfai - LinkedIn •

# **Floor Plans**



## **Student Union**





Once we accept our limits,



go beyond them!

~Albert Einstein~

