

Astronomy & Astrophysics

Speaker: Raju Guha Thakurta

Raja (Puragra) Guha Thakurta is a Professor at UCO/Lick Observatory, University of California Santa Cruz for over 21 years. He is passionate about research, teaching, mentoring, outreach and fundraising. Prior to this he was Assistant Astronomer in the Space Telescope Science Institute. He completed his Postdoctoral fellowship, MS and PhD, from Astronomy and Astrophysics, Institute for Advanced Study in Princeton University.

Bioengineering – Medical Devices

Speaker: Albert Mach

Albert is a San Jose native and now works at a large medical technology company. He will share his story on how he started his academic career in Bioengineering at U.C. Berkeley and then received his Ph.D. in Biomedical Engineering at UCLA, and his industry career working at a startup in San Francisco and a medical technology company in San Jose. Albert has experience mentoring high school students and will talk about how to prepare for a career in Bioengineering

Biomedical Research

Molecular Diagnostics and Genetic Testing

Speaker: Yvonne Thorstenson, PhD

A PhD in Genetics from UC Berkeley and Director of Product Development at Sirona Genomics , Yvonne will talk about the vastly expanding world of genetic testing, DNA sequencing, my career path and a prediction about the future. Hint: it will involve computers.

Biotechnology

Speaker: Eric Sharps

I completed my Doctorate (Ph.D.) in biochemistry in 1979 from Penn State University. I have over 35 years of experience in the biotechnology and pharmaceutical industries. When I started, I was an analytical protein biochemist for over 12 years at Monsanto, Hoffmann-La Roche and Scios (formerly California Biotechnology). Projects included essential work on herbicide-resistant (GMO) crop plants (soybean), bovine growth hormone, alpha interferon, interleukin 2 and basic fibroblast growth factor.

Beginning in 1992, I managed investments in venture capital and later, in public equity markets, exclusively in the health care arena. As a venture capitalist with Berkeley International Capital Corporation, my colleagues and I completed investments in sixteen, late-stage medical device companies between 1992 and 1995. All except one went public or were acquired. Since February 1995, my one-person company, Foursquare Partners, has provided independent investment advice to institutional healthcare investors - mostly hedge funds - in the biotechnology and medical device sectors.

Careers in a Software Product Organization

Speaker: Nilesh Shah

I am a Sr. Program Manager at Talix Inc. (recently renamed business Unit of Healthline.com) I have a undergrad degree in Electronics Engineering from University of Mumbai and Masters Degree in Electrical Engineering from Indian Institute of Technology, Mumbai. I started my career in Software Development. I worked in the US for 4 years before moving back to India. I grew up the ranks by progressively taking larger responsibilities like Project Manager and eventually headed the offshore unit (225+) of a Product company. During this period I did a General Management course from Indian Institute of Management.

I like my current role as it keeps me sufficiently in touch with technology at the same time exposes the business side of Project Management including Costing, Profitability, Delivering Value etc...In this session I will talk about various roles within a product organization.

Computer Science: Bio Computation related Career Options

Speaker: Guha Jayachandran

Guha Jayachandran is an alumni of Monta Vista. He went on to Stanford, where he stayed to earn a Ph.D. in Computer Science (bio computation). Since leaving school, he has enjoyed an interdisciplinary entrepreneurial career applying computation to a variety of fields.

- I am currently working on projects spanning advanced computation, biomedicine, and Internet technologies—primarily as a founder of [Onu Technology, Inc.](#). We will be publicly launching soon. I'm also an adviser to [Collective Health](#).
- WalmartLabs was formed upon Walmart's acquisition of Kosmix. Among other initiatives, I created and led Get On The Shelf, [a contest and web series](#) that helped small businesses and gained [positive attention](#) in social and traditional media.
- I joined Kosmix upon its acquisition of my startup, Cruxlux.
- At Cruxlux, founded with a friend; we built powerful new technologies related to search, context, and semantic relationships.
- At Stanford, I served project management and lead development roles for Folding@Home, a distributed computing project (simulating protein folding and drug binding) that grew into the most powerful in the world.

Disruptive Technologies

Speaker: Syrous Parsay

Learn about technology solutions that change the way we live and do thing. Such technologies often have the power to disrupt entire industries (Smartphones, Netflix, Facebook, Twitter, Uber, Cloud Computing, Self-driving cars, Drones, Artificial Intelligence, Virtual Reality, Robotics, etc.).

What do these technologies have in common? What are the new and upcoming frontiers? How are they funded? Who influences them? What college majors lead to them? How much money can be made? When and where do you start? What is a typical career path?

Syrous Parsay -- a lecturer at Stanford University, retired inventor, entrepreneur, investor, and corporate executive, who is experienced in high tech, medical science, retail, academia, and venture capitalism.

Engineering – Mechanical

Speaker: Martin Nordby

Mr. Martin Nordby received his B.S. in Mechanical Engineering from Stanford University. He works at SLAC National Accelerator Laboratory as the Chief Mechanical Engineer for the LSST project, a ground-based 8 meter class telescope to investigate the nature of dark energy and evolution of the universe. While at SLAC, Mr. Nordby has served as mechanical design engineer, mechanical installation manager, and systems integration lead for a number of physics research instruments, and worked with engineers and scientists from many fields and around the world.

Engineering – Product Design: H/W & S/W

Speaker: John Mein, MSEE
Vice President of Sales & Business Development

John has been based in Silicon Valley for 25+ years. His experience in design engineering, field applications, sales, and teaching university level classes has prepared him well to serve as the VP of Sales & Business Development for Petzila, Inc.

John started his career as a design engineer at Ball Aerospace in Boulder, CO. He then moved into field applications with Texas Instruments and Integrated Device Technology as well as a number of startup ventures in the chip and optical world.

John has taught classes in circuit theory and electronics at Metro State College in Denver, CO, and microprocessor architecture courses at USCS Extension in Santa Clara, CA. He is also a certified instructor for several Miller Heiman sales methodology classes.

Petzila is an Internet of Things (IoT) company with our first product on the market. It is a remote Treat Cam that allows you to remotely see your dog or cat, talk to them, take a picture of them, and launch a treat to them! We are headquartered in downtown San Jose with 12 employees.

John earned his BSEE from Kansas State University, an MSEE from Stanford University, and did Ph.D. EE work at Colorado State University and University of Colorado.

Topic:

I will talk about my career path and what types of backgrounds we have for employees at Petzila, Inc., including h/w and s/w engineering. I will discuss the background in bringing a product to market like the Petzi Treat Cam and what skillset would prepare you to be a part of a startup like Petzila or to even start your own company!

Engineering - Product Design

Speaker: Greg McNeil, BSME, MSME and MBA
VP Product Design Innovation Labs at Flex

BSME, MSME and MBA

20+ years of product design experience working for large and start-ups companies.

Flex is a \$20B+ “sketch to scale” solutions company that engages in product design and manufacturing for our customers worldwide. We operate manufacturing in over 30 countries and have more than 2000 product design engineers worldwide.

Topic:

Mr. McNeil leads a specialized and innovative product engineering team that designs unique and leading edge products for the consumer, automotive, wearable, enterprise, fashion and emerging markets. During this session we will cover the many different product and engineering functions as they relate to electronics product design. Areas include hardware design (electrical engineering and computer engineering), software design (software engineering and computer science), system design, product architecture, mechanical design (mechanical engineering), test and certification, program management and product management. We will review some unique product design examples and have time to answer any questions you have.

Engineering – Software

Speaker: Renee Rashid

Renee Rashid is currently Cofounder and CEO of her own software startup in EdTech, which is an exciting journey. Prior to that, she has worked as a Software Engineer for over 15 years, in such diverse areas as medical visualization, 3D graphics, and animation. She originally started out college wanting to be a physicist and astronaut. Come find out what experiences changed her mind, why she is happy she did, and how you can figure out what your best career options are.

Engineering – Space System

Speaker: Alysa Sakkas

Alysa Sakkas is a Systems Engineer at Lockheed Martin Space Systems Company. Prior to being hired by Lockheed Martin, Alysa received a Computer Engineering degree from the University of Michigan. She began her career as a software/firmware developer, gradually expanding and transitioning to larger systems engineering and system integration roles beyond the computer engineering discipline. With more than 25 years in the aerospace industry, she has supported all aspects of the space systems program lifecycle from concept development to development, test, delivery, and operation of space systems. She enjoys the opportunity to continuously learn and also enjoys participating in student outreach programs. She has spoken at many schools about her career path and also serves on the University recruiting team for Lockheed Martin.

Information Technology – Video Gaming Industry

Speaker: Vijay Sangamalli

Director of IT, Sony Playstation

Vijay received a Master's degree in Engineering from University of South Carolina-Columbia and he currently works as the Director in IT at Sony Computer Entertainment America LLC. He has over 15 years of IT experience in various medium and large scale ERP & OBIA implementations, EDW and BigData, applications management & support, vendor management & governance combined with technical breadth and business process knowledge. He manages a team of project managers, support and delivery teams and provided business consulting on roadmaps, requirements, enhancements, product upgrades, and support issues. He is responsible for Annual Budget Planning for on-going and future projects and providing strategy, and roadmaps for various IT apps.

Topics: Video Gaming industry, Network Security, BigData, Business IT.

Material Science and Engineering in Semiconductor Industry

Speaker: Kuo-Wei Chang

Kuo-Wei received B.S. degree in Chemical Engineering and M.S. degree in Material Science and Engineering at National Taiwan University. Kuo-Wei came to United States in 1994 for graduate study at Northwestern University, Evanston, Illinois and received Ph.D. degree in Materials Science and Engineering in 2000, and relocated to Silicon Valley since. Have been holding engineer positions at Western Digital Corporation, Intel Corporation, and currently Sandisk. Professional skills are focused on semiconductor material chemistry, physics, and processing. Most of the career experience has been in advanced development for data storage technologies, including disk drive and phase change memory.

Technology - Career Options

Speaker: Preethi Narayanan

Preethi Narayanan is currently working at Amazon. I manage a team of engineers who are building a device to enable some cool technologies for consumers. It is an amazing time in engineering and technology in general and I have been part of these technological breakthroughs for about 20 years now. I have a Bachelor's degree in Electronics and communications and a Master's degree in software engineering. Before joining Amazon, I worked for 15 years at Motorola, at different locations, and in different teams. I have been fortunate to be part of developing bleeding edge technologies and to work with extremely talented engineers from around the world. I would like to see more women engineers making bigger impacts in technology and would like to share some of his experiences and some amazing opportunities available in this field.