SEPT. 04 Cooper Quintin, Electronic Frontier Foundation
COMPUTER SECURITY IS A UX PROBLEM
It is apparent now that cryptography and security software are essential to maintain privacy. However, as developers we often ignore the user interface of our creations. What good is a privacy or security tool if no one can use it? This talk will discuss the good, the bad, and the ugly of UI design—and why good security and good UI go hand in hand.

SEPT. 11 Silvia Figueira, Santa Clara University
EMPOWERING THE UNDERSERVED, ONE APP AT A TIME
Cellular phones are bringing computing to underserved communities. As people in these communities across the globe lack access to information, but do own cellular phones, apps are filling the gap by delivering meaningful information to improve lives. The Mobile Lab at Santa Clara University has been collaborating with local and international partners to enable cellular phones to help different communities. In this talk, we will present several mobile projects through which engineering students have been solving specific problems and helping underserved communities in the United States and abroad. We will also describe our first hackathon, Hack for the Homeless, which was organized by our ACM and ACM-W chapters and provided a venue for students to create important solutions for homeless individuals.

SEPT. 18 Jose Pagao, Enphase Energy
CONTINUOUS INTEGRATION OF CODE: DEVELOP, TEST, DEBUG, RELEASE, REPEAT
A day in the life of an Embedded Software Build Engineer at Enphase within an Agile Team. This talk is about my year at Enphase, I work in their Embedded Software Team and was previously on the QA Team as a Build Engineer. My first goal was to package the developed and regression-tested code into a tar ball, and share it with the System Verification Testing departments in the company. Now, my goal is to find bugs and fix them, so the changes made can be tested and verified. I work with a small group of dedicated Embedded Engineers who meet huge demands from the solar energy industry, daily. I will talk about the process I follow to build a software release, the tools I use to do it and my role within an Agile Team.

SEPT. 25 Cheryl MacDonald, Vertigo
DESIGN FOR NERDS: A CRASH COURSE
Designers and developers work together every day to create beautiful software, but how do those two integral parts of a team work together? In the real world? And how do developers learn just enough about interaction patterns, typography, and color to talk to designers? This talk is a crash course in design you can use on your own software, an introduction to the workflow you can expect between designers and developers on an engineering team, and how both halves of the equation can work together in harmony.

OCT. 02 William A. Pluhon, San Francisco State University
CHINESE THREAT TO U.S. ECONOMIC SECURITY
In an annual report on China published in 2013, the Pentagon stated that the Chinese government appeared to be siphoning off intellectual property from the United States and that the acquired intelligence could potentially benefit China's hi-tech industry and threaten the U.S. economy. Former White House Advisor Richard Clarke took this narrative a step further by explicitly claiming that Chinese spying is costing American jobs. Mike Rogers, the Republican congressman from Michigan who currently chairs the House Intelligence Committee, pulled out all the stops and went flat-out full bore. During a video segment released on CNBC he brazenly stated that cyber-attacks from China are the number one threat to U.S. economic security. Could Congressman Rogers be correct? Let's pause for a moment and reflect on this notion. Does Chinese cyber espionage actually represent this sort of existential threat?

OCT. 09 Bill Anklam, Agilent
THE VALUE AND ELEGANCE OF DIGITAL SIGNAL PROCESSING
The continuing advancement by the use of digital signal processing has delivered greater accuracy and speed with higher reliability and at lower cost to electronic and life science measurements. This tutorial will highlight some of the key techniques and technologies that are used in commercial communications systems and that have had significant impact on products from Keysight Technologies (formerly Agilent Technologies and originally Hewlett-Packard). In particular, the mathematical beauty and elegance of these techniques will be explored.

OCT. 16 Vicki Shreiner, Tandem
HOW TO MAKE BUSINESS APPLICATIONS TALK TO EACH OTHER
In a world filled with different types of databases, file formats and web services how do you make them all get along to easily share data, create reports and automate processes? Enter Tandem Open Studio for ESB (Enterprise Service Bus) an open-source free software package for Application Integration. In this talk I’ll highlight various open source technologies (Apache Camel and Jolokia) and describe how Tandem ESB leverages them to allow non-programmers to easily develop solutions that allow the different pieces to communicate.

OCT. 23 Jason Shankel, The Stupid Fun Club
THE PSYCHOLOGY OF THE AUGMENTED WORLD
Since the time of Freud, we have been trying to quantify the experience of being human. In this talk, I will describe how modern psychology, post-modern literature and socially connected mobile devices have opened new vistas of human understanding.

OCT. 30 Alex Freedland, Mirantis
OPENSTACK
OpenStack is the most popular open source "cloud operating system". OpenStack is also the largest Open Source ecosystem currently combining more than 1,200 developers. It is housed in its own Foundation boasting over 350 corporate and over 16,000 individual members – all of this created in less than four years, a completely unprecedented story.

NOV. 06 Tom Siezak, Lawrence Livermore Laboratories
BARRIERS TO BIOINFORMATICS: WHY DOESN'T YOUR DOCTOR HAVE DIGITAL DIAGNOSTICS YET?
Driven by advances in bioinformatics and diagnostics techniques, a wide range of infectious disease diagnostics are available and widely used in research. From multiplex PCR to pan-microbial microarrays to NextGen Sequencing of complex samples, sensitive and specific identification of harmful pathogens can be made. But these are not yet available in your doctor’s office or HMO lab, in most cases. This talk will identify some of the many Valley of Death barriers that must be overcome before we can bring the dreams of precision (personalized) medicine and mobile medicine to fruition. Although focused on medical diagnostics, most of the material discussed here applies equally well to other fields where regulations, IP, or historical inertia of practitioners can stall your CS-led breakthrough ideas for years.

NOV. 13 Lila Tretiakov, Wikimedia
WIKIMEDIA - QUO VADIS?
A brief overview of how we got to where we are and some thoughts about what we can expect in the future.

NOV. 20 STUDENT PRESENTATIONS / SHORT PRESENTATIONS OF RESEARCH CARRIED OUT BY SONOMA STATE COMPUTER SCIENCE STUDENTS

NOV. 27 THANKSGIVING (No Lecture)

DEC. 04 END OF SEMESTER CELEBRATION / AWARDS PRESENTED TO SONOMA STATE COMPUTER SCIENCE MAJORS