

COMPUTER SCIENCE

Thursdays at 12:00 noon
Salazar 2016

COLLOQUIUM

FEB. 11	Joe Dupre, Sonoma State University, IT Information Security Management in the Enterprise Information and knowledge are valuable and worth protecting. We need efficient methods of protection in large homogenous environments. How do you get smart people with divergent ideas moving in the same direction on information security? Do the following: strategic alignment, risk management on all issues, provide value - reduce support costs, enhance competitive stance, assure success of strategy deployment resource management - people, technology, process assurance process integration - get connected and involved with other security groups in your enterprise. Performance measures - Did we do what we set out to do, does the data indicate we should be doing something else? Multiuse of metrics. This talk is based on the curriculum for the ISACA.org Certified Information Security Manager (CISM) certification. Pizza after talk in Darwin 28
FEB. 18	John Davis, Microsoft Research, Mountain View BEE3: Silly Putty for Computer Scientists! Parallel computing for the masses has arrived. Unfortunately, software, tools, research, and pedagogy are lagging behind with only niche successful parallel applications existing, print statements still being used for debugging, research limited to using existing platforms, and few colleges and universities offering parallel programming and computer architecture classes for undergraduates. Let me present BEE3, the Berkeley Emulation Engine, version 3. BEE3 is a reconfigurable computing platform that we are using to target three main research areas: Computer Architecture, Systems, and Application Acceleration. Using these examples, I will demonstrate how we are using reconfigurable computing systems to help build parallel software and tools, conduct fundamental research, and provide a pedagogical platform. Finally, I will also present some of the current limitations of reconfigurable systems.
FEB. 25	Shane Witnov, University of California, Berkeley Privacy and Anonymity in a Networked World: 20th Century Law and 21st Century Technology Social networks record the details of associations, document indiscrete moments and preserve long forgotten comments. Cell phones provide logs of one's location. An analysis of this information can reveal intimate details of a person's life threatening privacy on two fronts. First, technology has far outpaced the law leaving much of our online activities with few legal protections. Second, new technological developments threaten our ability to remain anonymous online and off. This talk will examine some recent examples of this conflict among the law, technology, and privacy.
MAR. 04	Todd Ziesing, Terrace Software, San Francisco User Interface Design – The Past, Present & Future of Design Everyone interacts with computers through software each and every day. Software on your phone, the Internet, your computer, your television, your DVR, your car, etc. Software 'wins' or 'loses' in the marketplace based on the user experience. Software determines if hardware 'wins' or 'loses' in the marketplace. And software determines what features are offered to what user at what time. This discussion will follow the progression of user interface design and review some of the new promising technologies that will impact the future of our interaction with machines.
MAR. 11	Chris Brooks, University of San Francisco Automated Tagging and Categorization of Blogs Tags have recently become very popular as a means for annotating and indexing online content such as blogs, due to their ease of use, as well as the ability to share tags between users. There are potential advantages and weaknesses of tags as a mechanism for organizing and retrieving content online. We will present a brief overview of the necessary machine learning and information retrieval techniques, and then describe results characterizing the sorts of tasks for which tags are well suited. We will then describe techniques for automatically annotating documents and an algorithm for automatically inducing relationships between tags as a first step to creating a more expressive tagging scheme. We will end with a discussion of current work on automatically recommending tags and visualizing related tags.
MAR. 18	Parthasarathy Ranganathan, HP Labs, Palo Alto Saving the World, One Server at a Time! Power and energy management, and more recently, sustainability are emerging to be critical challenges for future IT systems. While there has been a lot of prior work in this space, a lot more needs to be done. We must discuss the challenges and opportunities in rethinking how we study and reason about energy efficiency for future systems. Specifically, how confluence of emerging technology and industry trends offer exciting opportunities to systematically rethink the "systems stack" for the next orders of magnitude improvements in energy efficiency.
MAR. 25	Cricket Liu, Infoblox, Santa Clara A Closer Look at Threats to the Domain Name System Surely you've been following the story regarding the new DNS security threat and its implications for the security of all Internet and network-based applications. You may have already patched your servers, but you should be aware that more patches are imminent. So what is this all about, really? The short answer is cache poisoning. While cache poisoning is not new, Dan Kaminsky discovered a new way to exploit this vulnerability. What was thought to be too complex or time consuming for hackers to exploit turns out to be simple. Virtually all network based applications - email, Web apps, eCommerce - EVERYTHING is at risk.
APR. 01	Allison Holloway, Oracle, Redwood Shores Why (I think) Databases are Interesting Let's begin with a brief overview of database internals, from a query down to how the data are retrieved from disk. And then let's discuss new and perennial problems in database design.
APR. 08	SPRING RECESS (No Lecture)
APR. 15	Ankur Chandra, IBM, San Jose 3D Virtual Worlds for Business and Education 3D Virtual Worlds like the one presented in the movie Avatar are captivating, immersive, and a great platform for interacting with students, professors, as well as for conducting business. Let's survey the virtual world's landscape, and discuss how universities and companies like IBM are leveraging this technology. Then let's end this talk with a view into one virtual world and show how IBM is using it to build better service professionals.
APR. 22	Jason Shankel, The Stupid Fun Club Generative Storytelling For Entertainment Software Content development represents a significant bottleneck in the development of entertainment software. The speaker will discuss how basic literary theory and GOFAL (Good Old Fashioned AI) solutions for natural language processing can be applied to create generative interactive storytelling systems capable of producing entertaining content on the fly. Pizza after talk in Darwin 28
APR. 29	Jim D. Giles, The New Scientist The Cybercrime Ecosystem Criminal hackers used to be motivated by a desire to showcase their disruptive skills, but cybercrime is now big business. I'll describe two cybercrime investigations that reveal the surprisingly large range of criminal activity that is taking place online. The investigations show -- to use a metaphor from real-world crime -- that cybercrime runs from petty street theft to highly organized criminal companies that net millions of dollars annually.
MAY 06	STUDENT PRESENTATIONS SHORT PRESENTATIONS OF RESEARCH CARRIED OUT BY SONOMA STATE COMPUTER SCIENCE STUDENTS Pizza during talks in Salazar 2016
MAY 13	END OF SEMESTER CELEBRATION AWARDS PRESENTED TO SONOMA STATE COMPUTER SCIENCE MAJORS Pizza during talks in Salazar 2016



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Parking is usually available in Lots "E" and "F" and costs \$2.50

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