

Announcer=Stefan

[cue Daily show music]

[cue CSElogo with Evening news under it]

Announcer: Friday December 3rd, 2010. This is the CSE News Network's Evening news with Hovav Shacham.

Hovav: Good evening. The top story today is ongoing revelations of corruption and scandal exposed by the recent Wikileaks release of internal CSE documents. The documents, including 5 years of internal e-mails and memoranda, are suspected to have been leaked by a Google employee as part of the recent Jacobs School Gmail conversion. CSE Department Chair Rajesh Gupta has called the release a threat to "departmental security". We now go to Bill Griswold who is providing a special report on what's being called... "LogicGate".

Bill: Thanks Hovav. The claims are nothing short of extraordinary. If true, the LogicGate materials document a broad range of questionable activities of which the most explosive is practice that is being called "extraordinary graduation" in which students are blindfolded, taken to secret rooms, and forced to defend a dissertation under duress. The e-mails further document a series of enhanced education techniques, including required classes, forced research exams and the notorious "paperreading" of CSE221, a practice that is widely regarded as torture.

Hovav: Thanks Bill. However, this is just the surface of the accusations that are emerging in light of this material and it's become clear that CSE is a department ruled by the powerful, through fear. After the break I'll talk with one faculty member who was willing to talk to us on camera.

[Commercial #1 (cue MIMITW music)]

Announcer:

If he were to use gotos they would not be considered harmful

His data is always in the cache

Conferences apply to his papers for acceptance

As a hobby he renders feature-length computer animated films; by hand

He is... the most interesting computer scientist in the world.

Kirill: I do not always program functionally, but when I do I use Haskell. (pause)

Stay pure my friends.

[Return from commercial (music ends)]

Hovav: Welcome back. We now have Professor Geoff Voelker in studio, who agreed to speak to us in spite of great personal risk. Dr. Voelker, can you explain – in your own words – how the department has changed while you’ve been there and what you have to say about the most extreme LogicGate claims of drug running, death squads and rampant empiricism.

Geoff (eyes darting around): Thanks hovav. (pause) I’m... I’m really not sure where to begin (long pause). (sigh) Its all true. (pause) When I started in CSE I did real systems _science_. I studied the fundamental effects of caching under various constraints and workloads. Then Savage came. At first, I thought it was a good thing for the department. He brought lots of money, attracted students with sexy problems, and told a great story. Its all about impact he would say... always impact. I was lured by his promises of relevance and excitement. Soon I was on the impact bandwagon too. I was blind to what was happening.

[cue pharma picture, picture of kirill with latex glove, picture of Kirill with loupe looking at watch, gun pictures].

Geoff: It all came to a head when Savage brought on the Russian... Levchenko... – everyone said he was a theory student, but I should have looked into his background... I blame myself. With Levchenko everything changed and we morphed from a research organization to a large scale criminal enterprise. He ran illegal drugs (pause), smuggling (pause), and forgery (pause) I tried to complain to the chair, but he said that the “research” was bringing in millions of dollars and we couldn’t be picky in this fiscal climate. Worse, he turned my own students against me... brainwashing them with promises of glory and training them into his own elite death squads (long pause). I live in fear every day that my next paper may be my last.

Hovav: (turning to Geoff) Thank you Dr. Voelker. (turning back to audience) We were unable to reach department chair Rajesh Gupta for comment, but spokesperson Joyce Bernardo told the CSE News Network that while the department does not dispute the particular facts in question, that they are, quote, “taken out of context and do not reflect the comprehensive research accomplishments of our faculty, staff and students”.

After the break we will highlight some of those accomplishments in our weekly segment: “CSE Stuff”.

Commercial #2 (cue MIMITW music)

Announcer:

He knows if your program will terminate

Once he wrote a program for the Turing test; it won the race for governor

_ His_ iPhone supports Flash

When he chairs a conference, only the good papers are accepted

He is... the most interesting computer scientist in the world.

Kirill: I do not always queue, but when I do, I queue FIFO (pause)

Stay bursty my friends.

[Return from commercial (music ends)]

Hovav: Welcome back. Tonight in our segment “CSE Stuff” we highlight the top new research achievements here in San Diego.

Hovav: First, up a recent collaboration between CSE faculty member Tajana Rosing and Research Scientist, Yuvraj Agarwal, combines their two energy related efforts into one unified system driven by a new human-centric user interface designed by Professor Bill Griswold. Dr. Griswold is here with us in studio to explain the work.

[cue redlight/greenlight picture/animation]

Bill: The idea underlying Project Redlight/Greenlight is to save power by scheduling utilization dynamically. In our system, a central controller, implemented in this prototype by my daughter using a megaphone, but any young child will do, will vocally declare so-called “green light” periods of activity during which computers may be used in the department. However, at random intervals she will call a “red light” period and any computers found still drawing power are erased and rebooted. The key insight behind our interface design is that by drawing on the powerful metaphor of a classic children’s game, we are able to implicitly educate users about the importance of power conservation and thus impact usage.

Hovav: Thank you Bill. Next up we have Stefan Savage who will describe a spin-off effort from his group’s recent work on automobiles.

[cue pants picture and animation to cranky site]

Stefan: Thank you Hovav. I want to be clear while the automotive work was a large team effort, the credit for today’s highlight goes solely to Steve Checkoway. His recently published

“Experimental Security Analysis of a Modern Pant” is destined to be a classic. He educates us that modern pants – from jeans to chinos – are not merely textiles, but are a complex communications fabric, pervasively monitored and controlled by dozens of digital computers. Indeed, he documents that the only part of a modern jean that is truly manually controlled is the top button; the rest is computer intermediated. To demonstrate this point Checkoway and his colleagues reverse engineered a modern chino pant and showed that by introducing rogue instructions via the coin pocket they could infiltrate the Embedded Crank Unit, or ECU, and create malicious cranky pants. Checkoway would not identify the particular brand of pants used – saying that he believes the cranky pants vulnerability is an industry-wide problem. However, textile industry experts claim that the threat is small since few people make their change pockets available to outside actors and the hypothetical threat of remote pant-compromise via laundry soap is far fetched. More information can be found at their Web site.

[cue tangled picture, teeth picture, and tooth light picture]

Hovav: Thanks Stefan. In other news, Iman Sadeghi and his advisor Henrik Wann Jensen are basking in the glory of their huge SIGGRAPH success with rendering hair – featured in Disney’s Tangled. However, Iman has since chosen to focus on an even more ambitious challenge now.... Teeth. Now supported by a Colgate fellowship, Iman has studied deeply the complex physical light transport interactions posed by rendering modern teeth – complexities that have so far prevented Pixar and Disney alike from pursuing the dental-oriented stories so popular in live-action films. As part of his model, Iman is able to capture the specular reflection of the enamel, forward light scattering at the dentino-enamel junction, complex caustics that introduce halos around molar fissures, while still providing intuitive controls to artists for holistic effects such as plaque and tartar. Industry-watchers expect to see Iman’s algorithms in a range of animated vampire and werewolf films appearing this summer.

[cue xbiz site]

Hovav: Finally, I’d like to highlight some of my own work, joint with Dongseok Jang and his advisors Ranjit Jhala and Sorin Lerner. Our rigorous academic study of “history sniffing” on porn sites has attracted widespread interest from the popular media.... such as leading adult industry forum xbiz. Impact. We’ve since started follow-ons to this work, including “history peeping”, “history listening” and “history tasting”. I asked my colleague Soren Lerner to speak about the experience. Sorin?

Sorin: (speaking to the audience) When I was a graduate student I always wondered what my advisors meant when they said “Try to work on a sexy problem”. I didn’t understand what they meant, until now. When Hovav suggested I shift my focus from traditional programming systems to model checking porno sites I was certainly intrigued, but I didn’t

know how transformative it would be. Now all my papers get accepted, my students work long hours and I have the personal satisfaction of working on a problem that has real impact on the common man.”

Hovav: Thanks Sorin. We have to take a commercial break, but when we return we’ll look at how the LogicGate revelations are impacting the ongoing unionization effort at UCSD.

Commercial #3 (cue MIMITW music)

Announcer:

He once introduced a bug, just to see how it feels
His transactions only need one phase to commit
Google links to him, to improve their PageRank
If you asked, he could tell you if computer science is really a science

He is... the most interesting computer scientist in the world.

Kirill: I rarely commit, but when I do, I use only one phase (pause)
Stay ACID my friends.

[Return from commercial (music ends)]

Hovav: Welcome back. In our final news segment today we’re covering the unionization effort that has been a lightning rod for controversy. Originally, it was only the United Autoworkers union that was seeking to organize TAs and GSRs, but with new revelations of kickbacks and payoffs, what seemed like a shoe-in has become much less certain. In light of this, several new unions are now vying to organize the graduate student body ranging from the Screen Writers Guild, which argues that students need to institute paper writing work-stoppages or even a research strike to get their needs met, to the National Football League Payer’s Union who sees themselves as a more natural fit for computer science students than the Autoworkers. Perhaps the most interesting candidate is Ranjit McMillan, hot off his campaign for New York Governor, who is here recruiting with a message of open access to food, lower academic standards, and contractual guarantees of on-campus personal item mail delivery. Ranjit?

Ranjit:

I represent “The Standards Is Too Damn High Party!” Grad students are working 6 hours a day, and 20 hours a week, and some a TA. Faculty asking students to take classes, pass classes, teach

classes, do research. The Standards are Too Damn High! My main job is to put a computer on your desk, free food in the hallway and personal items delivered to your mailbox. This is politics as usual, playing a silly game, its not going to happen. The Standards are Too Damn High Movement, the people I'm here to represent, can't get their personal mail sent. Their packages are being sent back, right now as I speak. And they can't take food in the hallway, breakfast, lunch or dinner. Listen! Someone's TA, TA's stomach just growls, did you hear it, gotta listen like me. The Standards are Too Damn High!

Hovav: That's quite a platform. I understand your message has been received quite negatively by some faculty who feel that student standards should be raised and not lowered. How do you respond to them?

Ranjit: As a karate expert, I will not talk about any professor up here. But our children cannot graduate. They can't pass the core, they can't pass the research exam, they can't defend their thesis. Once again, why? You said it (pause for audience): "The Standards are Too Damn High"

Hovav: Thank you Mr. McMillian. However, while your message is succinct, some have argued that you're a one issue candidate. Can you offer a position on any of the other key political questions of the day, such as the legalization of marijuana, or is your focus strictly on academic standards.

Ranjit: No, no, no. That's a totally different problem. Have you seen Gary Cottrell? . I'm totally against legalization. Why? Because if it passes, "the faculty will be too damn high"

Hovav: Once again, our thanks for joining us today in studio. And now, as always, for our closing segment we have Kamalika Chaudhuri, popularly known as Ms. Kee Laneous, who will read questions sent to her advice column "Dear Misc".

Kamalika: Dear Misc, I don't have a Web page and I'm panicking. Professor Savage says that I'm destined to fail in life as a result. But I'm a theory student and this HTML stuff seems very complex. What should I do? Sincerely, "Panicked about Pages".

[queue picture of theory web site... possibly with markings]

Kamalika: Dear Panicked, don't worry... many people have trouble creating Web pages... even some faculty and each discipline has its own way of handling the problem. Let me explain how the theory group handles this problem using a formal approach. First, the base case. We assume some theory web page exists within the set of Web pages. Next, the inductive step. If a theory page exists, then an updated version of the theory page exists also. As a result, we can prove that the theory web page both exists and is up to date.

Kamalika: Dear Misc, I use Chez Bob, but I take food without paying and whenever a new food shipment arrives, I leave the building so no one will ask me to help. This has always seemed consistent with the grad student credo of self-interested pursuit of free food. However, recently, I've come to doubt myself. Can you help? Sincerely, "Unethical from Ithaca"

Kamalika: Dear Unethical, you should indeed be worried. The issue is less ethics than personal safety. Recently Wikileaks accounts have revealed the political climate in Chez Bob to be highly tense. Their leader, Dictator for Life Michael Vrable, is reported to be highly unstable. In a recent public proclamation he declared: "There's presently a pile of cardboard boxes sitting on the couches in the grad lounge. Do you know what would be awesome? Having that pile disappear." When that didn't happen, he personally ripped the heads off of three students. Faculty are attempting to use diplomatic means to graduate him, but that effort will take time. In the interim it is best to help out with chez bob and pay for every item you consume.

Kamalika: Dear Misc, I'm a faculty member in CSE and every year I skip the holiday party. I figure only students go, so why should I bother. Sincerely, "Tacky with Tenure"

Kamalika: Dear Tacky, don't worry. Only the uncool faculty ever go. Your non-attendance is in fact a mark of distinction that is memorialized for all time. You should feel free to continue missing it and focusing on important things like grooming your CV.

Hovav: Thank you Kamalika. And that's all for tonight. Please join us next week as we cover recent socking developments on "So You Think You Can Hack!" And now a few final words from our sponsor.

Commercial #4 (cue MIMITW music)

Announcer:

Nigerian Princes really do send him millions of dollars via e-mail
His personality is so magnetic, he can only use Flash-based storage
He can compute entirely with zeros; he uses ones for flair
His dissertation required his advisors to defend themselves

He is... the most interesting computer scientist in the world.

Kirill: I don't always use machine learning, but when I do I support vector machines

Kirill: Stay supervised my friends.

[Return from commercial (music ends)]