

Tech Talks

QUANTUM TECHNOLOGIES IN INFORMATION SECURITY: THE SPEAR AND THE SHIELD

Speaker: Professor Jungsang Kim (Duke University)

Place: Hudson 208

Description: New discoveries in quantum information processing technologies provide the means to break the most secure encryption techniques known to men. At the same time, it provides secure communication techniques that nobody can break, even in principle. This disruptive technology, if realized, has the potential to change what security means in information science.

REVERSE ENGINEERING UNOFFICIAL APIs FOR FUN AND PROFIT

Speaker: Joe Levy (Microsoft)

Place: Teer 203

Description: While many apps and websites provide official APIs to allow integration into their services, some do not. But with the tools, tactics, and technologies discussed in this talk, you'll learn how to take your hacks to the next level by integrating into services behind walled gardens.

MANAGING ASYNCHRONICITY WITH RQ

Speaker: Doug Crockford (eBay)

Place: Teer 203

Description: Turn based servers are now joining turn based browsers in providing race-free and deadlock-free interactivity. The event-driven model has long been popular in UI systems, but the nature of work in servers presents some new challenges. Functional programming provides solutions, including monads, arrows, promises, and various flavors of FRP. This is another such solution, intended to enhance ease of use through minimalism.

INTRO TO LOCK-FREE CONCURRENCY

Speaker: Dean Chen (eBay)

Place: Hudson 208

Description: Scaling up backend services is hard. Fortunately, it is not necessary to resort to locks in many situations. This talk will demonstrate and compare and contrast three popular lock-free abstractions for addressing concurrency: actors(scala)/message passing(go), the event loop(node.js) and STM(haskell)/SSI(postgres).

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HOW TO BE A BADASS HACKER

Speaker: Mike Swift (MLH & hackNY)

Place: Hudson 208

Description: Learn how to beef up your hacker skills with some protips and tricks from Swift, founder of Hacker League and Commissioner of Major League Hacking. You'll also have the opportunity to hear about the hackNY Summer Fellowship program and how you can spend your summer living and working in the heart of NYC with some of the top hackers around.

AAA GAME GRAPHICS FOR MOBILE DEVICES

Speaker: Niklas Smedberg (Epic Games)

Place: Teer 203

Description: The fast progress of mobile graphics hardware is making it possible to implement advanced rendering techniques that were previously only considered for dedicated gaming consoles. However, there are fundamental technical differences that should be addressed in order to get the most out of mobile GPUs. This presentation provides a detailed technical description of how a mobile GPU works and how console-style graphics effects have been implemented for mobile in Unreal Engine.

IMPACTING A BILLION LIVES

Speaker: Baris Yuksel (Google)

Place: Teer 203

Description: Discussion on how software engineering is flourishing in Africa, what Google is doing, and why software engineers have so much impact on it.