MS&E 91SI: U.S. National Cybersecurity

Fall 2004

Welcome to MS&E 91SI U.S. National Cybersecurity, a new student-initiated course sponsored by the interdisciplinary Stanford Cybersecurity Program.

Description

As the U.S. and the world become increasingly reliant on digital systems and the public Internet, the security and reliability of these complex systems becomes increasingly critical. Ensuring that our digital infrastructure can meet these escalating demands necessitates development of both the right technology and the right public policy. This interdisciplinary course will draw on speakers and research from the fields of engineering, public policy, law and economics in an effort to investigate and determine whether today's Internet is an appropriate platform on which to operate critical infrastructure services that affect U.S. national security.

Course Logistics

Time: Wednesday, 4:15 - 6:30 PM

Location: TBD

Grading and Units: 2 units, S/NC only

Class size: Enrollment limited to 20 students

Prerequisites: There are no technical or policy prerequisites; curiosity and interest

are the only requirements. The course is particularly relevant for students interested in independent research or honors thesis work in

the area of cybersecurity.

Website: http://msande91si.stanford.edu

Course Staff

Faculty Sponsor: William J. Perry

Student Facilitators: Martin Casado <a sado@stanford.edu>

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Dan Wendlandt <danwent@stanford.edu>

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Schedule

September 30 Introduction: The Cybersecurity Challenge

October 5 (Tues.) Tech Breakout I: Internet Basics

October 7 How To Think About Cybersecurity

October 12 (Tues.) Tech Breakout II: Viruses, Worms, Firewalls and Crypto

Guest Speaker: Tal Garfinkel, Computer Science

October 14 An Industry Perspective

Guest Speaker: TBA

October 21 Cybersecurity Policy

October 28 Cybersecurity and Law

Guest Speaker: Jennifer Granick, Stanford Law School

November 4 Security Metrics and Risk Management

Guest Speaker: Kevin Soo Hoo, Sygate

November 11 Assessing the Threat

Guest Speaker: Peter Neumann, SRI

November 18 What Do We Want in a Future Information Infrastructure?

Guest Speaker: David Alderson, CalTech

November 22 Liability, Negligence and Cyber-Insurance

Guest Speaker: Erin Kenneally, San Diego Supercomputing Center

December 2 Legislative Debate