Notes from the Field: Understanding and Intervening on Cybercrime from a Social and Economic Viewpoint

Speaker: Prof. Damon McCoy
George Mason University
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Abstract

Modern day cybercrime is largely profit-fueled and much of modern day computer security is focused on developing new defenses that close security gaps, which allow criminals to exploit vulnerable systems. However, this focus on understanding the technical methods used by cyber criminals has not been matched by a complimentary effort to understand the underlying economic factors that drive much of this large scale cybercrime. In this talk, I will demonstrate that an understanding of the underlying value chain of a cybercriminal business can play a key role in allowing defenders to make better informed decisions about potential places to successfully intervene. As a case study, I’ll show the decomposition of the value chain for spam advertised counterfeit goods and how an empirical analysis of this business can be used to launch an informed intervention directed at a vulnerable point along their value chain.

Biography

Damon McCoy is an Assistant Professor in the CS department at GMU. Previously he was a Computer Innovation Fellow at the University of California, San Diego. He obtained his Ph.D. from the University of Colorado, Boulder. His research includes work on wireless privacy, anonymous communication systems, cyber-physical security, and economics of e-crime. More generally, he is interested in exploring and improving the security and privacy of large-scale systems.