Peter Snyder

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RESEARCH INTERESTS

Computer Security, Privacy, and Cryptography.

EDUCATION

Ph.D. Computer Science

2012 - Present

University of Illinois at Chicago, Chicago, IL Expected graduation date: Spring 2017

B.A. Political Science

2002 - 2006

Lawrence University, Appleton, WI

PUBLICATIONS

Jason Clark, Peter Snyder, Damon McCoy, and Chris Kanich. "I Saw Images I Didn't Even Know I Had: Understanding User Perceptions of Cloud Storage Privacy." *In ACM Conference on Human Factors in Computing Systems* (CHI) (2015).

Peter Snyder and Chris Kanich. "One Thing Leads To Another: Credential Based Privilege Escalation." *In ACM Conference on Data and Application Security and Privacy (CODASPY) poster session* (2015).

Peter Snyder and Chris Kanich. "Cloudsweeper: Enabling Data-Centric Document Management for Secure Cloud Archives." *In Greater Chicago Area Systems Research Workshop (GCASR)* (2014).

Peter Snyder and Chris Kanich. "CloudSweeper: enabling data-centric document management for secure cloud archives." *In Proceedings of the 2013 ACM workshop on Cloud computing security workshop* (2013).

RESEARCH

Measuring the Amount and Costs of Browser Complexity

The modern web has seen an explosion in the number of browser features implemented and available to web developers. This research measures the increased complexity imposed by these new features, the usefulness of this added complexity to users and web authors, and the cost these new features entail to users privacy and security.

CRISP: Abstractions for Security Guarantees in Interactive Web Applications

Web users currently have few guarantees about the security properties of websites they visit, and the frequency and sophistication of attacks on web servers means that a site that is benign one day can become malicious the next, all invisibly to the client. This project investigates new web systems that prioritize client security and code predictability at minimal cost to web author expressivity.

Cloudsweeper

https://cloudsweeper.cs.uic.edu

Developed tool to measure and mitigate the frequency of plaintext password sharing in Gmail archives. The public tool allows users to redact or encrypt-in-place found passwords. The site has had over 2,500 users and has secured over 38,000 messages.

RELATED ACTIVITIES

IGERT Fellow Electronic Security and Privacy IGERT Fellow	2013 - 2016
Security Advisor Advisor on security and privacy for citizen reporting group TIMBY.org	2015 - 2016
Invited Talk Department of Information Engineering at the Chinese University of Hong Kong No Please, After You: Detecting Fraud in Affiliate Marketing Networks	2015
Founder UIC Cryptography and Privacy Reading Group	2015
External Reviewer Reviewed papers for IEEE Symposium on Security and Privacy 2016	2015
External Reviewer Reviewed papers for ACM Conference on Computer and Communications Security 2016	2015
External Reviewer Reviewed 3 papers for IEEE Symposium on Security and Privacy 2015	2014
President UIC Computer Science Graduate Student Association	2013 - 2014
Invited Talk No Secrets: Journalism in the Age of Surveillance Surveillance Defense: Practical Steps for Security and Privacy	2014
Invited Talk University of Illinois at Chicago Security Lunch Presented Dyer, Kevin P., et al. "Protocol misidentification made easy with format-transforming	2013 encryption."
Invited Talk University of Illinois at Chicago Security Lunch Presented AlFardan, Nadhem J., and Kenneth G. Paterson. "Lucky Thirteen: Breaking the TRecord Protocols."	2013 TLS and DTLS
Invited Talk University of Illinois at Chicago Advanced Programming Seminar Series Mirthful Mashups: Building Scaleable Web Applications	2013
1st Place Symantec Cyber Challenge Competition, a capture the flag style security competition. Competed national competition.	2013 I in Symantec's
External Reviewer Reviewed 2 papers for Network and Distributed System Security Symposium (NDSS)	2013
Invited Talk University of Illinois at Chicago Advanced Programming Seminar Series Modern Web Development: From Angle Brackets to WebSockets	2012