Stephanie Rogers

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EDUCATION

University of California, Berkeley Expected May 2014
M.S. Computer Security | Management of Technology **GPA: N/A**

University of California, Berkeley Expected May 2013
B.A. Computer Science | B.A. Applied Mathematics **CS GPA: 3.87/4.0**

Math Coursework: Linear Algebra, Discrete Math, Abstract Algebra, Number Theory, Real Analysis
CS Coursework: Computer Security (CS161, CS261), Cryptography (Math 116), Privacy (CS294), Artificial Intelligence, Machine Learning, Behavioral Data Mining (CS294), Technology Firm Leadership, Networking, Operating Systems, Algorithms

RESEARCH

Password Analytics, *Professor David Wagner* Aug 2012 to Present
- Analyzing the password usage patterns of Windows users
- Specifically focusing on the usability of passwords with regards to incorrect attempts
- Built tools and scripts to decode important security events from a Windows machine, a analyze the complexity of passwords, and determine correlations between the two

Fined-grained Access Control for NFC Apps, *Professor David Wagner* Aug 2012 to Dec 2013
- Categorized the functionality and security vulnerabilities of NFC applications
- Discuss and built a prototype to solve the issue of authorization of NFC tags by providing fine-grained access control based on data type and author
- Examine issues with NDEF security and how to mitigate these with regards to NFC

Touchanalytics, *Professor Dawn Song* Aug 2012 to Feb 2013
- Using machine learning to authenticate phone users based off of touchscreen usage
- Extracted over 30 features of a stroke in Matlab and classified these strokes
- Extended the original experiments, testing out several variations to increase accuracy
- Built an Android application to capture the stroke events of a user when swiping

Android Security, *Professor David Wagner* Oct 2011 – May 2012
- Large scale measurement study to determine the number of Android applications vulnerable to malicious websites that a user may access while browsing.
- Developed a web crawler tool in Python that determines whether a user can navigate to a malicious third party site through a series of links

GUI Classification of Android Applications, *Professor Dawn Song* Jan 2012 to May 2012
- Classified a set of more than 1000 Andriod applications based on GUI features
- Wrote a rolling window Python script, which hashes portions of the GUI code in an application to form feature vectors.

Web Application Attacks, *Imperva* May 2011 to Jan 2012
- Contributing author in Imperva's Web Application Attack Report
- Classified attacks by determining categorization rules based off of manual analysis
- Monitored more than 10 million individual attacks across 30 applications

PAPERS

Feldman, Max. **Rogers, Stephanie.** Xia, Richard. "Fined-grained Access Control for NFC Applications." *Class research project.* <http://dl.dropbox.com/u/15655339/261.pdf>

Rogers, Stephanie. Huang, James. Qi, Huapeng. "GUI Classification of Android Applications." *Class research project.* <http://dl.dropbox.com/u/15655339/161.pdf>

Be'ery, Tal. Niv, Nitzan. **Rogers, Stephanie.** "Imperva's Web Application Attack Report." *Imperva Docs*. July 2011. Web. <http://www.imperva.com/docs/HII_Web_Application_Attack_Report_Ed1.pdf>

EXPERIENCE

Software Engineer Intern
May 2012 to Aug 2012

LinkedIn

- Front-end web development on LinkedIn's new profile page
- Built a prototype of a new application for LinkedIn's website from the ground up
- Involved the complete development cycle – design, review, development, launch

Undergraduate Student Instructor
May 2011 to Present

University of California, Berkeley

- Instructor for UC Berkeley's introductory computer science class, CS61A and upper division computer security course, CS161
- Developed new teaching material for a course undergoing significant change – in Fall 2011, the CS61A was taught in new language—python—for the first time in 20 years
- Created an eBook and interactive quizzes to take advantage of online technologies for CS161

TECHNICAL SKILLS

- Languages: Proficient in Python, Java, C, Lisp, HTML, CSS. Experience with Objective-C, Unix, Javascript, SQL, Matlab, LaTeX, Haml, Ruby, R
- Frameworks: Play!, Ruby on Rails

LEADERSHIP

Upsilon Pi Epsilon – *President, Vice President, Industrial Relations, Coordinator* Jan 2011 to Present

- Elected to UPE CS Honor Society during second year for high scholastic achievement
- Elected president after two semesters of dedicated involvement
- Led the candidacy process in Spring 2012 resulting in an increase of members by 100%
- Greatly improved UPE's school-wide recognition by planning successful professional events
- Dramatically restructured the internal organization and officer roles of the club

CS Kickstart – *Instructor* Summer 2011 to Present

- Developed an entire curriculum for a one-week introductory computer science camp aimed towards females with no previous programming background
- Taught a class of 30 females entering Berkeley for two summers in a row
- Curriculum consisted of manipulating images in ways that provided immediate feedback on the more typical programming concepts such as recursion and edge detection

HONORS/AWARDS

CRA Nominee February 2013

EECS Honors Degree Program Sept 2012 to Present

- Graduating with honors on my transcript for my Computer Science degree
- Chose an applied mathematics academic concentration

UPE Named Scholarship Award – *Dan Drew Award* September 2012

- This scholarship is UPE's highest award. Only one undergrad award is presented a year

SRC Undergraduate Research Scholarship Jan 2012 to Present

- Intel-based scholarship awarded to underrepresented individuals in computer science pursuing research in the EECS department at Berkeley

North Coast Builders Exchange Scholarship Aug 2009 to Present

Berkeley's Leadership Award Finalist August 2012