

RICHARD ROBERTS

CONTACT INFORMATION

5112 Iribe Center
8125 Paint Branch Drive
College Park, MD 20742

ricro@cs.umd.edu
(732) 504-9050
www.richard.technology

EDUCATION

University of Maryland, College Park

Computer Science, Ph.D. (In Progress)

2017 - Present

Ph.D. Advisor - Dr. Dave Levin

University of Pennsylvania

Computer & Information Science, MSE

2015 - 2017

Research Advisor - Dr. Nadia Heninger

Thesis - Analyzing, Inducing, and Capitalizing on Memory Faults in Android Systems

Computer Science, BSE (Mathematics minor)

2012 - 2016

Academic Advisor - Dr. Camillo J. Taylor

PUBLICATIONS & RESEARCH

Refereed Publications

Measurement and Analysis of Automated Certificate Reissuance

Olamide Omolola, **Richard Roberts**, Ishtiaq Ashiq, Taejoong Chung, Dave Levin,
Alan Mislove.

PAM 2021 (Passive and Active Measurement Conference)

*You Are Who You Appear to Be: A Longitudinal Study of Domain Impersonation in
TLS Certificates*

Richard Roberts, Yaelle Goldschlag, Rachel Walter, Taejoong Chung, Alan Mislove,
Dave Levin.

ACM CCS 2019 (Conference on Computer and Communications Security)

*When Certificate Transparency Is Too Transparent: Analyzing Information Leakage in
HTTPS Domain Names* (Short Paper)

Richard Roberts, Dave Levin.

WPES 2019 (Workshop on Privacy in the Electronic Society)

The Effect of Entertainment Media on Mental Models of Computer Security

Kelsey Fulton, Rebecca Gelles, Alexandra McKay, **Richard Roberts**,
Yasmin Abdi, Michelle Mazurek.

SOUPS 2019 (Symposium on Usable Privacy and Security)

Measurement and Analysis of Hajime, a Peer-to-peer IoT Botnet

Stephen Herwig, Katura Harvey, George Hughey, **Richard Roberts**, Dave Levin.

NDSS 2019 (Network and Distributed System Security Symposium)

Invited Talks

Investigating VPN Ads on YouTube

Omer Akgul, **Richard Roberts**, Moses Namara, Dave Levin, Michelle L. Mazurek.

ConPro 2021 (Workshop on Technology and Consumer Protection)

.how .you .spot .whoswho .online .sucks: Deceiving Users with Generic Top-Level Domains

Richard Roberts, Rachel Walter, Daniela Lulli, Dave Levin.

ConPro 2020 (Workshop on Technology and Consumer Protection)

Poster Presentations

Mental Models of Domain Names and URLs

Richard Roberts, Daniela Lulli, Abole Raut, Kelsey R. Fulton, Dave Levin.

SOUPS 2020 (Symposium on Usable Privacy and Security)

Measuring Domain Impersonation with Certificate Transparency Logs

Richard Roberts, Yaelle Goldschlag, Dave Levin.

ACM IMC 2018 (Internet Measurement Conference)

Measurement and Analysis of Hajime, a Peer-to-peer IoT Botnet

Stephen Herwig, Katura Harvey, George Hughey, **Richard Roberts**, Dave Levin.

ACM IMC 2018 (Internet Measurement Conference)

SERVICE

IEEE Security & Privacy 2021 (*Shadow Program Committee*)

IEEE Security & Privacy 2020 (*Shadow Program Committee, Poster Jury,
Poster Session Moderator*)

TEACHING EXPERIENCE

Teaching Assistant - Computer and Network Security (CMSC 614)

Spring 2021

University of Maryland

Professor - Dr. Dave Levin

Teaching Assistant - Introduction to Networks and Security (CIS 331)	Spring 2015
University of Pennsylvania	2016
Professor - Dr. Nadia Heninger	2017
Teaching Assistant - Introduction to Computer Systems (CIS 240)	Spring 2014
University of Pennsylvania	Fall 2014
Professors - Dr. Camillo J. Taylor, Dr. Thomas Farmer, Dr. John Seng	2015
	2016

PROFESSIONAL EXPERIENCE

Cloudflare	2020
<i>Cryptography Research</i> - Intern	
Expanded anti-impersonation and trademark abuse technology.	
Synack Inc.	2016 - 2017
<i>Research & Data</i> - Remote Contractor, Summer Intern	
Researched into automated vulnerability detection, implemented efficient UDP service probing, and deployed open-source vulnerability scanners.	
Microsoft Corporation	2015
<i>Software Engineer</i> - Summer Intern	
Prototyped the Microsoft Office Researcher tool.	
Palantir Technologies Inc.	2014
<i>Infrastructure Quality Engineer</i> - Summer Intern	
Created a mock dataset generator and tested performance of data analysis software at scale.	

AWARDS & HONORS

Dean's Fellowship - <i>University of Maryland</i>	2017
CIS Senior Design Third Prize Award - <i>"/dev/!random"</i>	2016
Tyfone IOT Security Challenge Second Place - <i>"E.L.E.C.T."</i>	2016
Graduated Magna cum Laude - <i>University of Pennsylvania</i>	2016
Dean's List - <i>University of Pennsylvania</i>	2013-2014 2015-2016