

# RICHARD ROBERTS

## CONTACT INFORMATION

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5112 Iribe Center  
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## EDUCATION

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**University of Maryland, College Park**  
Computer Science, Ph.D.  
Ph.D. Advisor - Dr. Dave Levin

2017 - Present

**University of Pennsylvania**

Computer & Information Science, MSE  
Research Advisor - Dr. Nadia Heninger

2015 - 2017

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

Computer Science, BSE (Mathematics Minor)  
Academic Advisor - Dr. Camillo J. Taylor

2012 - 2016

## PUBLICATIONS & RESEARCH

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### Refereed Publications

**Investigating Influencer VPN Ads on YouTube**

2022

Omer Akgul, [Richard Roberts](#), Moses Namara, Dave Levin, Michelle Mazurek.  
IEEE S&P 2022 (Symposium on Security and Privacy)

**Measurement and Analysis of Automated Certificate Reissuance**

2021

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**

2019

[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) 2019  
Richard Roberts, Dave Levin.  
WPES 2019 (Workshop on Privacy in the Electronic Society)

**The Effect of Entertainment Media on Mental Models of Computer Security** 2019  
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** 2019  
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** 2021  
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** 2020  
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** 2020  
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** 2018  
Richard Roberts, Yaelle Goldschlag, Dave Levin.  
ACM IMC 2018 (Internet Measurement Conference)

**Measurement and Analysis of Hajime, a Peer-to-peer IoT Botnet** 2018  
Stephen Herwig, Katura Harvey, George Hughey, Richard Roberts, Dave Levin.  
ACM IMC 2018 (Internet Measurement Conference)

## **TEACHING EXPERIENCE**

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<b>Teaching Assistant - Computer and Network Security (CMSC 614)</b>	Spring 2021
University of Maryland	Fall 2022
Professor - Dr. Dave Levin	
<b>Teaching Assistant - Introduction to Networks and Security (CIS 331)</b>	Spring 2015
University of Pennsylvania	2016
Professor - Dr. Nadia Heninger	2017
<b>Teaching Assistant - Introduction to Computer Systems (CIS 240)</b>	Spring 2014
University of Pennsylvania	Fall 2014
Professors - Dr. Camillo J. Taylor, Dr. Thomas Farmer, Dr. John Seng	2015
	2016

## SERVICE

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

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

## PROFESSIONAL EXPERIENCE

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

## AWARDS & HONORS

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<b>Dean's Fellowship</b> - <i>University of Maryland</i>	2017
<b>CIS Senior Design Third Prize Award</b> - <i>"/dev/!random"</i>	2016

**Tyfone IOT Security Challenge Second Place - "E.L.E.C.T."** 2016

**Graduated Magna cum Laude - *University of Pennsylvania*** 2016

**Dean's List - *University of Pennsylvania*** 2013-2014  
2015-2016