

EDUCATION

PhD Computer and Information Science (Expected 2019)

Computer and Information Security
University of Pennsylvania

Master of Science in Engineering (05/2017)

Computer & Information Science
University of Pennsylvania

Bachelor of Science (07/2014)

University of Melbourne
Computer Science (1st Class Honours), Physics (2nd Class Honours, Div. A)

Study Abroad (2012/2013)

University of Pennsylvania, School of Engineering and Applied Sciences
Dean's List

Diploma of Music (07/2014)

Melbourne Conservatorium of Music
Classical Voice

PUBLICATIONS

Measuring small subgroup attacks against Diffie-Hellman Luke Valenta, David Adrian, Antonio Sanso, Shaanan Cohney, Joshua Fried, Marcella Hastings, J. Alex Halderman, Nadia Heninger. In The Network and Distributed System Security Symposium 2017.

A Systematic Analysis of the Juniper Dual EC Incident Stephen Checkoway, Jacob Maskiewicz, Christina Garman, Joshua Fried, Shaanan Cohney, Matthew Green, Nadia Heninger, Ralf-Philipp Weinmann, Eric Rescorla, Hovav Shacham. In ACM Conference on Computer and Communications Security (CCS), 2016. **Best Paper Award**

DROWN: Breaking TLS using SSLv2 Nimrod Aviram, Sebastian Schinzel, Juraž Somorovsky, Nadia Heninger, Maik Dankel, Jens Steube, Luke Valenta, David Adrian, J. Alex Halderman, Viktor Dukhovni, Emilia Käsper, Shaanan Cohney, Susanne Engels, Christof Paar, and Yuval Shavitt. In 25th USENIX Security Symposium, 2016. **Finalist Facebook Internet Defense Prize**

Factoring as a Service Luke Valenta and Shaanan Cohney and Alex Liao and Joshua Fried and Satya Bodduluri and Nadia Heninger. In Financial Cryptography 2016.

INVITED TALKS

Security of a Different Sort: Social Engineering, PennApps Invited Talk, September 2017

A Tour of Backdoored Cryptography, University of Melbourne, August 2017

Minds and Machines, Philomathean Society, September 2016

Real World Impacts of Cryptography Policy University of Melbourne, July 2016

EMPLOYMENT & COMMUNITY SERVICE

Graduate Associate

2015-2017

Riepe College House

- Provided counseling and support services to over 70 freshmen
- Organized highly attended weekly activities, including academic review sessions and study breaks
- Led crisis management in situations ranging from psychological distress to fire/flooding

Intern Security Engineer 2014
 Facebook Inc.
 • Improved data deletion system, reducing missed data by over 90%
 • Developed new internal security tooling

Education Officer, Head IT Services
 Hineni Youth and Welfare Australia (Volunteering) 2008-2014
 • Board member managing curriculum and education performance of counselors for youth 12-18.

TEACHING

University of Melbourne
 • *Protocol Problems & Factoring Fun*, Guest Lecture, Graduate Cryptography August 2016
 • *Introduction to Quantum Cryptography*, Guest Lecture, Graduate Cryptography July 2014
 • **Dean’s Award for Excellence in Tutoring** 2014
 • Computer Systems 2014
 • Foundations of Computing 2014
 • Theoretical Research in Computer Science Presenter - Cryptography 2014
 • Engineering Computation 2013

University of Pennsylvania
 • Guest Lecturer on Hardware Security 2016
 • Technology & Policy (Head TA) 2016
 • Operating Systems (Head TA) 2015, 2016
 • Computer Security (Head TA) 2015, 2016, 2017
 • Algorithms and Data Structures 2013
 • Outstanding Project Award, Machine Learning 2014

EXTRA CURRICULAR ACTIVITIES

• Secretary Melbourne University Physics Student Society 2012
 • Second Place Shalheveth Frier International Physics Competition 2009
 • Librarian, Philomathean Society Φ 2017
 • Four-time judge PennApps Hackathon 2014-2017
 • Longest serving member, Penn Glee Club 2012-2017

EXTERNAL REVIEWING

• Financial Cryptography 2016
 • IEEE Symposium on Security and Privacy 2016
 • 25th USENIX Security Symposium 2016

SELECTED MEDIA COVERAGE

“Drown attack: How weakened encryption jeopardizes ‘secure’ sites” *The Guardian* 3/2016
 “Breaking 512-bit RSA with Amazon EC2 is a cinch. So why all the weak keys?” *Ars Technica* 10/2015