

RYAN WAILS

ryanswails@gmail.com

Additional contact details available upon request.

EDUCATION

Georgetown University Ph.D. in Computer Science <i>Advisor: Micah Sherr</i>	Washington, D.C. Aug 2019–Present
The Pennsylvania State University B.S. in Computer Science, B.S. in Mathematics	University Park, PA Aug 2012–May 2016

PROFESSIONAL EXPERIENCE

U.S. Naval Research Laboratory Computer Scientist	Washington, D.C. Aug 2017–Present
Peraton; Contracted to U.S. Naval Research Laboratory Software Engineer	Herndon, VA May 2016–Aug 2017
Penn State Applied Research Laboratory Undergraduate Researcher	University Park, PA Aug 2014–May 2016
The Pennsylvania State University Mathematics Grader	University Park, PA Sep 2013–May 2014
Cambridge-Lee Industries LLC MIS Technician	Reading, PA Jun 2012–Aug 2014

REFEREED CONFERENCE PUBLICATIONS

Ryan Wails*, Florentin Rochet*, Aaron Johnson, Prateek Mittal, and Olivier Pereira. CLAPS: Client-Location-Aware Path Selection in Tor. In *Proceedings of the 2020 ACM SIGSAC Conference on Computer and Communications Security (CCS '20)*, November 9–13, 2020, Virtual Event, USA. ACM, 2020. (To appear.) *Joint primary-authorship

Ryan Wails, Aaron Johnson, Daniel Starin, Arkady Yerukhimovich, and S. Dov Gordon. Stormy: Statistics in Tor by Measuring Securely. In *Proceedings of the 2019 ACM SIGSAC Conference on Computer and Communications Security (CCS '19)*, November 11–15, 2019, London, United Kingdom. ACM, 2019. (Acceptance Rate: 16%)

Gerry Wan, Aaron Johnson, Ryan Wails, Sameer Wagh, and Prateek Mittal. Guard Placement Attacks on Path Selection Algorithms for Tor. *Proceedings on Privacy Enhancing Technologies (PoPETs)*, 2019(4), 2019. (Acceptance Rate: 22%)

Ryan Wails, Yixin Sun, Aaron Johnson, Mung Chiang, and Prateek Mittal. Tempest: Temporal Dynamics in Anonymity Systems. *Proceedings on Privacy Enhancing Technologies (PoPETs)*, 2018(3), 2018. (Acceptance Rate: 16%)

AWARDS

2015 ARL Student Contribution Award, awarded by Penn State Applied Research Laboratory.

TALKS

Location Aware Path Selection in Tor. *The 13th Workshop on Hot Topics in Privacy Enhancing Technologies (HotPETs 2020)*, Virtual Event, July 2020

Stormy: Statistics in Tor by Measuring Securely. *The 2019 ACM SIGSAC Conference on Computer and Communications Security (CCS '19)*, London, United Kingdom, November 2019

Stormy: Statistics in Tor by Measuring Securely. *The 15th Semi-Annual GU-CS Graduate Research Presentation Day*, Georgetown University, September 2019

Guard Placement Attacks on Path Selection Algorithms for Tor. *DC-Area Anonymity, Privacy, and Security Seminar (DCAPS)*, Georgetown University, June 2019

Tempest: Temporal Dynamics in Anonymity Systems. *The 18th Privacy Enhancing Technologies Symposium (PETS 2018)*, Barcelona, Spain, July 2018

Tunable Transparency: Secure Computation in the Tor Network. *DC-Area Anonymity, Privacy, and Security Seminar (DCAPS)*, Georgetown University, June 2018

Tempest: Temporal Dynamics in Anonymity Systems. *DC-Area Anonymity, Privacy, and Security Seminar (DCAPS)*, University of Maryland, October 2017

ACADEMIC SERVICE

Program Committee Member

The 19th ACM Workshop on Privacy in the Electronic Society (WPES '20). 2020.

Coordinator

Georgetown SecLab Security Reading Group. 2019–2020.

External Reviewer

The 29th USENIX Security Symposium (USENIX Security '20). 2020.

Reviewer

ACM Computing Surveys. 2020.

External Reviewer

The 20th Privacy Enhancing Technologies Symposium (PETS 2020). 2020.

Junior Program Committee Member

The 19th Privacy Enhancing Technologies Symposium (PETS 2019). 2019.

Reviewer

IEEE Communications Letters. 2018.

External Reviewer

The 18th Privacy Enhancing Technologies Symposium (PETS 2018). 2018.

External Reviewer

The 2017 Workshop on Privacy in the Electronic Society (WPES '17). 2017.

TEACHING EXPERIENCE

Private Tutor

C Programming, Algorithms and Data Structures. 2019.

Project Mentor

Project mentor for an undergraduate student at Princeton University. 2019.

Substitute Lecturer

Networking and Telecommunications (Penn State IST 220). Spring 2016.

Substitute Lecturer

Intermediate Programming (Penn State CMPSC 122). Fall 2015.

Tutor

Algorithms and Data Structures. Fall 2015.

Substitute Lecturer

Object-Oriented Programming (Penn State CMPSC 221). Summer 2015.

Substitute Lecturer

Networking and Telecommunications (Penn State IST 220). Spring 2015.

Grader

Calculus II (Penn State MATH 141). Spring 2014.

Grader

Calculus I (Penn State MATH 140). Fall 2013.

PROGRAMMING PROFICIENCIES

Advanced Proficiency C, C++, Python

Basic Proficiency C#, Go, Haskell, Java, R, Rust, SQL