

Anna Kornfeld Simpson

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Education

- University of Washington (Seattle, WA)**
 - *PhD Student in Computer Science and Engineering* 2014 - Present
 - *Masters Degree in Computer Science and Engineering* Received 2016
- Princeton University (Princeton, NJ)**
 - *B.S.E Computer Science* *Summa Cum Laude*
September 2010 - June 2014

Publications and Posters

- **Anna Kornfeld Simpson**, Adriana Szekeres, Jacob Nelson, and Irene Zhang. “Securing RDMA for High-Performance Datacenter Storage Systems.” *12th USENIX Workshop on Hot Topics in Cloud Computing (HotCloud 20)*. July 2020.
- **Anna Kornfeld Simpson**, Franziska Roesner, Tadayoshi Kohno. “Securing Vulnerable Home IoT Devices with an In-Hub Security Manager.” *Proceedings of IEEE PerCom 2017 - the First International Workshop on Pervasive Smart Living Spaces (PerLS 2017)*. March 2017.
- **Anna Kornfeld Simpson**, Shwetak N. Patel, Franziska Roesner, Tadayoshi Kohno. “Securing Vulnerable Home IoT Devices with an In-Hub Security Manager.” *University of Washington Tech Report, UW-CSE-17-01-01*, 2017.
- Ada Lerner*, **Anna Kornfeld Simpson***, Tadayoshi Kohno, Franziska Roesner. “Internet Jones and the Raiders of the Lost Trackers: An Archaeological Study of Web Tracking from 1996 to 2016.” *Proceedings of the 25th USENIX Security Symposium (USENIX Security 16)*. August 2016.
**Co-first-authors listed in alphabetical order.*
- **Anna Kornfeld Simpson**, Nabil Schear, Thomas Moyer. “Runtime Integrity Measurement and Enforcement with Automated Whitelist Generation.” Poster. *Annual Computer Security Applications Conference*. December 2014.
- Anne Edmundson, **Anna Kornfeld Simpson**, Joshua A. Kroll, Edward W. Felten. “Security Audit of Safeplug ‘Tor-in-a-Box’ ”. *4th USENIX Workshop on Free and Open Communications on the Internet (FOCI 2014)*. August 2014.

Awards and Honors

NSF Graduate Research Fellowship 2015
Lore von Jaskowsky Memorial Prize, Princeton School of Engineering and Applied Science . . . June 2014
Highest Honors (Summa Cum Laude), Princeton University Computer Science June 2014
Departmental Service Award, Princeton University Computer Science June 2014
Student Teaching Award, Princeton University Computer Science June 2014
Winner, Google Anita Borg Memorial Scholarship (1 of 30 North American winners) April 2013
Winner, Microsoft Scholarship March 2013

Research Experience

- **University of Washington** Research Assistantship
Advisor: Professor Irene Zhang 2018 -
 - My research focuses on building secure systems, preserving consumer privacy, and applying ideas from systems and cryptography research to advance security efforts in both research areas.
 - Exploring security challenges in recent research datacenter systems (collaboration with Dr. Jacob Nelson and Dr. Adriana Szekeres).

- **UW CSE**
Grad Liaison for Faculty Recruiting *2018-2019*
 - Created orientation on faculty recruiting before season started.
 - Prepared new centralized calendar and interface to feedback system.
 - Ensured all student meetings had leaders and that student questions and feedback were quickly addressed throughout the recruiting season.
- **UW CSE**
First-Year Mentoring Program Coordinator *2015-2016*
 - Grouped incoming students and current students into mentorship groups.
 - Coordinated quarterly dinners for all mentor group participants.
 - Initiated program for reimbursement for individual group gatherings.
- **Center for Information Technology Policy**
Undergraduate Fellows Forum Coordinator *2013-2014*
 - Since 2011, participated in CITP interdisciplinary reading groups on technology, society, and policy.
 - Encouraged undergraduate participation in CITP events, including reading groups and public lectures.
 - Organized twice-a-month lunch discussions or lectures on different technology policy issues.
 - Helped create an annual fall break trip to Washington, D.C. to see technology policy in practice.
- **Computer Science Undergraduate Council**
One of 5 appointed members *2013-2014*
 - Appointed from members of the senior class to represent undergraduate interests to the faculty and create a supportive environment for undergraduates in the department.
 - Advocated for policy changes to the chair and other faculty, planned departmental social events including the 2013 senior dinner and 2014 winter holiday party, represented the department at recruitment and Majors Fair events, worked on welcome information for incoming majors.
- **Princeton University Wind Ensemble**
Webmaster (2012-2013), Flute Section Leader (2011-2014) *2010-2014*
 - Maintained the Wind Ensemble website, updating concert and audition information each season.
 - Distributed parts and led special practices for flute players (about 15 musicians each semester).
- **Student Representative to University Trustees and Advisory Boards** *2013-2014*
 - Spoke about the Princeton undergraduate experience to meetings of the Princeton University Trustees (regarding residential college experience, June 2014), Engineering School Advisory Board (April 2014), Center for Information Technology Policy Advisory Board (April 2013) and Keller Center Advisory Board (regarding CITP certificate program, April 2013).
- **Women in Science Colloquium**
Co-President (2012), Vice President (2011), Co-Founder (2010) *2010-2013*
 - Coordinated dinners to bring together female faculty in science, math, and engineering with interested undergraduate and graduate students for casual discussion, mentorship and inspiration.
 - Planned and coordinated 4-6 dinners a semester (ranging from 20-60 attendees), as well as a graduate school panel, industry events, and outreach to high school students in partnership with other organizations.
 - As the first Vice President, I ran the mailing list and RSVP process and raised awareness about the group by working with departments and residential colleges.
 - As Co-President, I helped to expand the group, building collaborations with other campus organizations, and making sure our dinners were sustainable.
 - Heard feedback from many students, particularly first-years, that our dinners helped them feel like they belonged in the STEM community on campus.

Mentorship and Advising

- **First-Year PhD Student Mentor** *2015 -*
 - Answered questions from and regularly checked in on small group of first-year PhD students.
- **Undergraduate Tutoring Program, University of Washington CSE Department** *2014-2017*
 - Assisting undergraduates in computer science classes, including CSE 484 Security.

- **Mathey College and Engineering School** *2012 - 2014*
Peer Academic Advisor
 - Assisted 20-30 first-year students with course selection in the fall and spring.
 - Provided advice about academic resources, internships, and navigating Princeton throughout the academic year, both by email and at monthly study breaks.
- **Princeton SWE and PWiCS Undergraduate Mentorship Programs** *2012-2014*
Peer Mentor
 - Mentored small groups of younger female students annually, discussing courses, internships, and research involvement at monthly dinners.
 - Encouraged mentees to get involved in leadership of campus and departmental organizations, apply to scholarships or fellowships, and consider wide options after graduation.

Selected Outreach

- **Poster at UW CSE Women’s Research Day** *2014, 2016, 2019*
Presented on my research and internship projects to undergraduate women in CSE.
- **Cryptography Activity at UW CSE Open House** *2014-2016*
Prepared cryptography puzzles and guided middle and high school students through solving them.
- **Presentation to High School Computer Science teachers** *2014*
Presented on the “Security Mindset” to Puget Sound-area high school Computer Science teachers.
- **FIRST Lego League Robotics Team Mentorship** *2013-2014*
Coached elementary and middle school Girl Scout team in their first experiences with robotics.
- **FIRST Tech Robotics Team Mentorship Program** *2012-2014*
Founder and mentor
 - Founded and organized an ongoing mentorship program for a FIRST Tech Robotics team at a local all-girls’ high school.
 - Recruited mentors from PWiCS and Princeton’s robotics team to help the team with all aspects of the engineering process.
 - Served as a mentor in fall 2013 and fall 2014, when the team advanced to the state-level competition.
 - Several team members are now perusing engineering degrees in college.
- **Microsoft DigiGirlz Panelist** *2013*
Spoke about computer science to a group of middle and high school girls from under-privileged areas.
- **Computer Science @ Princeton High School** *2012*
Tutored high school students in introductory computer science.
- **Princeton Women in Computer Science** *Spring 2012*
Presentations to middle and high school students about robotics and computer science.
- **Girl’s Hat Day San Diego** *Summer 2011*
Met twice-weekly with girls 6-18 to encourage learning and interest in engineering.

Professional Associations

- Member, Sigma Xi, research honor society, nominated by Princeton Computer Science Dept. *2014-Present*
- Member, USENIX Association *2014-Present*
- Member, IEEE and IEEE Computer Society *2014-Present*
- Member, Association for Computing Machinery (ACM) and ACM-W *2013-Present*
- Member, National Society of Women Engineers (SWE) *2010-Present*