Anastasia Shuba

Personal Website: http://newport.eecs.uci.edu/~ashuba/ E-mail: ashuba22@gmail.com

INFORMATION GitHub: https://github.com/nshuba

RESEARCH Interests Mobile Security and Privacy, Ad-blocking, Mobile Data Analytics

EDUCATION

University of California, Irvine

Ph.D in Computer Engineering

Sept. 2014 - Jun. 2019

- Thesis: "Mobile Data Transparency and Control"
- Advisor: Athina Markopoulou
- GPA: 3.7

M.S. in Computer Engineering

Sept. 2014 - Jun. 2016

- Thesis: "AntMonitor: A System for Mobile Network Monitoring"
- Advisor: Athina Markopoulou
- GPA: 3.7

B.S. in Computer Engineering

Sept. 2010 - Jun. 2014

- Thesis: "Home Automation with Android"
- Advisor: Kwei-Jay Lin
- GPA: 3.8
- Graduated with Cum Laude

Work Experience

Symantec Corporation

Sr. Software Engineer

Aug. 2019 - present

Software Engineering Intern

Jun. 2018 - Sept. 2018

Working on network security solutions for Android, iOS, and MacOS.

Metronome Software

Graduate Software Engineering Intern

Jun. 2016 – Sept. 2016

 $Graduate\ Software\ Engineering\ Intern$

Jun. 2015 - Aug. 2015

Software Engineering Intern

Oct. 2012 - Sept. 2014

Designed and implemented a system aimed toward automatic forensic analysis using Volatility, The Sleuth Kit, LibVMI, and various virtualization platforms. Designed and implemented Android applications using Java and SQLite. Implemented web servers using Java, Hibernate, PostgreSQL, and Python.

Praxis BioSciences

Software Engineering Intern

June 2012 - Sept. 2012

Developed medical systems that involved Android devices and microcontrollers.

ACADEMIC EXPERIENCE

University of California, Irvine

Graduate Research Assistant

Sept. 2014 - Jun. 2019

Advisor: Athina Markopoulou

Designed and implemented Android applications aimed at helping users preserve their privacy. Developing machine learning models to predict presence of personal information, trackers, and advertisement in mobile network traffic.

Undergraduate Research Assistant

Sept. 2013 - Jun. 2014

Advisor: Kwei-Jay Lin

Designed and implemented an Android app used to control a home automation system.

Undergraduate Research Assistant

Apr. 2012 - Jun. 2012

Advisor: Rainer Doemer

Enhanced system level design in C++ for a SpecC reference compiler and simulator.

Honors and Awards PETS 2018: The Andreas Pfitzmann Best Student Paper Award

ARCS Foundation Scholar Award 2016-2018

University of California, Irvine EECS Fellowship 2014-2016

MobiHoc 2018: Student Travel Grant Award

SIGCOMM 2017: N2 Women Student Travel Grant Award

SIGCOMM 2017: Student Travel Grant Award PETS 2017: Student Travel Grant Award MobiCom 2015: Student Travel Grant Award

University of California, Campuswide Honors Program 2011-2014

Edison Scholarship 2010-2014

Publications

Peer-Reviewed Publications

- 1. A. Shuba, Z. Shafiq, A. Markopoulou, "NoMoAds: Effective and Efficient Cross-App Mobile Ad-Blocking," *Proceedings of the Privacy Enhancing Technologies Symposium (PoPETs)*, 2018, **The Andreas Pfitzmann Best Student Paper Award**
- A. Shuba, E. Bakopoulou, A. Markopoulou, "Privacy Leak Classification on Mobile Devices," *IEEE International Workshop on Signal Processing Advances in Wireless Communications (SPAWC)*, 2018
- A. Shuba, A. Le, M. Gjoka, J. Varmarken, S. Langhoff, A. Markopoulou, "AntMonitor: Network Traffic Monitoring and Real-Time Prevention of Privacy Leaks in Mobile Devices," Proceedings of ACM S3 Workshop on Mobile Computing and Networking, 2015
- A. Le, J. Varmarken, S. Langhoff, A. Shuba, M. Gjoka, A. Markopoulou, "AntMonitor: A System for Monitoring from Mobile Devices," Proceedings of ACM SIG-COMM Workshop on Crowdsourcing and Crowdsharing of Big Internet Data, 2015

Demos

- A. Shuba, A. Markopoulou, "Demo: AntWall A System for Mobile Adblocking and Privacy Exposure Prevention," Proceedings of the 18th ACM International Symposium on Mobile Ad Hoc Networking and Computing, 2018
- 6. A. Shuba, A. Le, M. Gjoka, J. Varmarken, S. Langhoff, A. Markopoulou, "Demo: AntMonitor A System for Mobile Traffic Monitoring and Real-Time Prevention of

Privacy Leaks," Proceedings of 21st International Conference on Mobile Computing and Networking, 2015

 A. Shuba, A. Le, M. Gjoka, J. Varmarken, S. Langhoff, A. Markopoulou, "Demo: AntMonitor - Network Traffic Monitoring and Real-Time Prevention of Privacy Leaks in Mobile Devices," Proceedings of ACM S3 Workshop on Mobile Computing and Networking, 2015, Best Demo Award

TEACHING EXPERIENCE

University of California, Irvine

Teaching Assistant

Fall 2016, Fall 2017, Spring 2019

EECS 148/CS 132 - Computer Networks

Ikazuchi Dojo

Technical Director

Dec. 2017 - present

Instructor

Dec. 2014 - Dec. 2017

Assistant Instructor

Sept. 2014 - Dec. 2014

In charge of curriculum development and test requirements. Leading weekly Aikido classes for groups of various ages and backgrounds. Mentoring students who are preparing for belt testing. Providing private training sessions for individuals wishing to accelerate their development.

Blizzard Entertainment

Visiting Martial Arts Instructor

May 2015 - present

Leading Aikido training courses for groups of gaming industry professionals.

Anteater Recreation Center

Martial Arts Instructor

Sept. 2014 - Jun. 2016

Designing and leading 10-week Aikido courses for groups of 10-35 university students.

Newport Harbor High School

Tutor

Sept. 2010 - March 2012

Tutored groups of 20-40 students of different backgrounds in advanced math and physics.

Discovery Science Center

Presenter

July 2011 - Sept. 2011

Explained scientific concepts to children in a fun and engaging way.

COMPUTING SKILLS

Programming Languages: Java, Python, JavaScript, Swift, C/C++

Mobile Development: Android and iOS

Miscellaneous: socket programming and network protocols (TCP/IP, DNS, HTTP)

Professional Activities Student Volunteer: ACM CoNEXT 2016, PETS 2017, N2 Women Workshop 2017,

SIGMETRICS 2018