Talia Lily Ringer

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EDUCATION

University of Washington

2015 - Present

Ph.D. in Computer Science *Advisor: Dan Grossman*

Programming Languages & Software Engineering

University of Maryland, College Park

2008 - 2012

B.S. in Mathematics and Computer Science

Advisor: Lawrence Washington

Honors Thesis: An Elliptic Curve Threshold Key Establishment Scheme

HONORS & AWARDS

NSF GRFP Fellow
Graduated with Honors in Computer Science
Graduation Speech Finalist
Corporate Scholar

University of Washington University of Maryland University of Maryland University of Maryland

PUBLICATIONS

Talia Ringer, Dan Grossman, and Franziska Roesner.

<u>AUDACIOUS: User-Driven Access Control with Unmodified Operating Systems</u>.

CCS 2016.

CURRENT RESEARCH

Proof Evolution

Working with Dan Grossman and Nate Yazdani to generate patches for proofs that break as a result of changes in theorems in proof assistants like Coq.

PAST RESEARCH

Amazon Web Services: Automated Reasoning Group

Summer 2016

Interned with Byron Cook's research group at Amazon. Designed and implemented a solver-aided domain-specific language to help developers write unit tests for web services.

TEACHING

University of Washington

Winter 2016

Teaching Assistant for Compilers

University of Maryland, College Park

Spring 2012

Teaching Assistant for Computer and Network Security

University of Maryland Academic Support & Career Development Unit

2010

Tutor

Tutored student-athletes in mathematics and computer science.

INDUSTRY

Amazon 2012 – 2015

Software Development Engineer

Worked with a team to develop the AmazonSupply website. Contributed to the development of an internal framework and reusable components used company-wide. Developed a data flow analysis tool for the framework and components. Participated in the launch of the service that enabled the partnership between Amazon and DonorsChoose. Launched Amazon Business marketplace. Served as a mentor for several engineers.

Amazon Summer 2011

Software Development Engineer Intern

Developed an internal Spring MVC web application to generate metadata for the AmazonSupply website in a safe and user-friendly manner. Enabled version control and staging for the metadata.

Carr Astronautics 2010 – 2011

Corporate Scholars Program – Software Intern

Assisted in the development of a parallel image mosaicing application. Wrote code in C, MATLAB, and Java, dealing primarily with reading, altering, and writing TIFF images with associated geographic data. Awarded a scholarship through the University of Maryland's Corporate Scholars Program. Continued to work part-time during the school year.

ACTIVITIES

UW CSE 2015 – Present

Mentor

Mentor for undergraduate women and graduate students in computer science.

TUNE House 2015 – 2016

Mentor

Living-and-learning community for undergraduate women in computer science.

Club Northwest 2012 – 2016

Board Member

NCAA Division I Cross-Country 2009

Scholar-Athlete

University of Maryland Women in Mathematics 2008 – 2012

SKILLS

Programming languages: Java, Ruby, OCaml, Scala, C, MATLAB, JavaScript. Other computer skills: Android, Coq, Software Engineering, Spring MVC, Linux. Languages: English, Hebrew.

INTERESTS

Academic: Type theory, verification, category theory, domain-specific languages, formal methods, computer security, program analysis, program synthesis, abstract algebra, cryptology.

Personal: Distance running, triathlon, logic and number puzzles, esoteric programming languages, singing, learning natural languages, neoclassical piano composition.