

Talia Lily Ringer

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<http://tlringer.github.io/>

EDUCATION

University of Washington	2015 – Present
Ph.D. in Computer Science	
M.S. in Computer Science	2017
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	University of Washington
Graduated with Honors in Computer Science	University of Maryland
Graduation Speech Finalist	University of Maryland
Corporate Scholar	University of Maryland

PUBLICATIONS

Talia Ringer, Dan Grossman, Daniel Schwartz-Narbonne, and Serdar Tasiran.
[A Solver-Aided Language for Test Input Generation](#).
To appear at OOPSLA 2017.

Talia Ringer, Dan Grossman, and Franziska Roesner.
[AUDACIOUS: User-Driven Access Control with Unmodified Operating Systems](#).
CCS 2016.

CURRENT RESEARCH

Proof Patching

Talia Ringer, Nate Yazdani, John Leo, and Dan Grossman

Proof brittleness is a major barrier to development in proof assistants like Coq. We are using differences in proofs of existing theorems to automatically generate patches for broken proofs that depend on those theorems.

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.

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.

MENTORSHIP**UW CSE**

2015 – Present

Mentor for undergraduate women and graduate students in computer science.

UW QMP

2016 – Present

Mentor for LGBT students from any major.

TUNE House

2015 – 2016

Mentor for a living-and-learning community for undergraduate women in computer science.

Amazon

Technical and career mentor for several software engineers.

2012-2015

COMMITTEES**Artifact Evaluation Committee**

POPL 2018

ACTIVITIES

Club Northwest
Board Member

2012 – Present
2015 – 2016

NCAA Division I Cross-Country
Scholar-Athlete

2009

University of Maryland Women in Mathematics

2008 – 2012

SKILLS

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

INTERESTS

Academic: Verification, proof engineering, proof search, domain-specific languages, type theory, category theory, 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, piano composition.