### Marcella Hastings

### Contact

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#### EDUCATION

University of Pennsylvania, Philadelphia, Pennsylvania USA

M.S., Ph.D., Department of Computer Science, (expected December 2020)

Advisor: Nadia Heninger

Tufts University, Medford, Massachusetts USA B.S., Computer Science and Mathematics, May 2015

Summa Cum Laude

### **PUBLICATIONS**

Refereed Conference Proceedings

SoK: General Purpose Frameworks for Secure Multi-Party Computation. Marcella Hastings, Brett Hemenway, Daniel Noble, and Steve Zdancewic. In 40th IEEE Symposium on Security and Privacy (Oakland '19). May 2019.

The Proof is in the Pudding: Proofs of Work for Solving Discrete Logarithms. Marcella Hastings, Nadia Heninger, Eric Wustrow. In *Financial Cryptography and Data Security* (FC '19). February 2019.

Measuring Small Subgroup Attacks on Diffie-Hellman. Luke Valenta, David Adrian, Antonio Sanso, Shaanan Cohney, Joshua Fried, Marcella Hastings, J. Alex Halderman, Nadia Heninger. In *Network and Distributed System Security Symposium* (NDSS '17). February 2017.

Weak Keys Remain Widespread in Network Devices. Marcella Hastings, Joshua Fried, and Nadia Heninger. In *Proceedings of the 2016 ACM on Internet Measurement Conference* (IMC '16). November 2016.

### INVITED TALKS

General purpose frameworks for secure multi-party computation

DC Area Crypto Day, December 2018

Theory and Practice of Multi-Party Computation Workshops, June 2019

Real World Cryptography, January 2020

## SERVICE

Program Committees: FC 2020.

External Reviewing:

PETS 2017, 2018, 2019. USENIX Security 2019.

Open-Source Software: MPC-SoK frameworks repository (https://github.com/MPC-SoK/frameworks).

### TEACHING

Teaching Assistant, University of Pennsylvania

CIS 331: Introduction to Networks and System Security, Spring 2017. CIS 556: Cryptography, Fall 2016. GEMS Computer Science Workshop, 2017.

Teaching Assistant, Tufts University

COMP 170: Theory of Computation, Spring 2015. COMP 50: Problem-Solving by Computer, Fall 2013. COMP 11: Introduction to Computer Science, Fall 2012 - Spring 2015.

# AWARDS AND HONORS

The James Schmolze Award for Excellence in Computer Science, Tufts University, May 2015 The Class of 1942 Prize Scholarship, Tufts University, May 2015 Tau Beta Pi