Marcella Hastings

Contact

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EDUCATION

University of Pennsylvania, Philadelphia, Pennsylvania USA

Ph.D., Department of Computer Science, (in progress)

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 Compilers for Secure Multi-Party Computation. Marcella Hastings, Brett Hemenway, Daniel Noble, and Steve Zdancewic. To appear 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. To appear in *Financial Cryptography*. 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). 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

SERVICE

External Reviewing

PETS 2017, 2018, 2019

Teaching

Teaching Assistant

CIS 331: Introduction to Networks and System Security, Spring 2017, University of Pennsylvania

CIS 556: Cryptography, Fall 2016, University of Pennsylvania

COMP 170: Theory of Computation, Spring 2015, Tufts University

COMP 50: Problem-Solving by Computer, Fall 2013, Tufts University

COMP 11: Introduction to Computer Science, Fall 2012 - Spring 2015, Tufts University

Middle School

GEMS Computer Science Workshop, 2017

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