Jessica Sorrell

Dept of Computer and Information Science
University of Pennsylvania
3401 Walnut Street
Philadelphia, PA 19104
(617) 945-6012
jsorrell@seas.upenn.edu
https://jess-sorrell.github.io/

RESEARCH INTERESTS
Responsible computing, algorithmic fairness, learning theory, differential privacy, lattice-based cryptography

CURRENT POSITION
Postdoctoral Researcher, Computer and Information Science
University of Pennsylvania, Philadelphia, PA
Advisors: Aaron Roth, Michael Kearns

EDUCATION
Doctor of Philosophy, Computer Science
University of California, San Diego, 2022
Advisors: Daniele Micciancio, Russell Impagliazzo

Master of Science, Computer Science
University of California, San Diego, 2020

Bachelor of Science, Applied Mathematics
Rochester Institute of Technology, Rochester, NY, May 2015

PUBLICATIONS
Ira Globus-Harris, Declan Harrison, Michael Kearns, Aaron Roth, Jessica Sorrell. *Multicalibration as Boosting for Regression.* ICML 2023.

Mark Bun, Marco Gaboardi, Max Hopkins, Russell Impagliazzo, Rex Lei, Toniann Pitassi, Satchit Sivakumar, Jessica Sorrell. *Stability is Stable: Connections between Replicability, Privacy, and Adaptive Generalization.* STOC 2023.

Baiyu Li, Daniele Micciancio, Mark Schultz, Jessica Sorrell. *Securing Approximate Homomorphic Encryption Using Differential Privacy.* Crypto 2022.

Russell Impagliazzo, Rex Lei, Toniann Pitassi, Jessica Sorrell. *Reproducibility in Learning.* STOC 2022.

Ilias Diakonikolas, Russell Impagliazzo, Daniel Kane, Rex Lei, Jessica Sorrell, Christos Tzamos. *Boosting in the Presence of Massart Noise.* COLT 2021.

Daniele Micciancio, Jessica Sorrell. *Simpler, Statistically Sender Private Oblivious Transfer from Ideals of Cyclotomic Integers.* Asiacrypt 2020.

Mark Bun, Marco Carmosino, Jessica Sorrell. *Efficient, Noise-tolerant, and Private Learning via Boosting.* COLT 2020.

Matilda Backendal, Mihir Bellare, Jessica Sorrell, Jiahao Sun. *The Fiat-Shamir Zoo: Relating the Security of Different Signature Variants.* NordSec 2018.

Daniele Micciancio, Jessica Sorrell. *Ring Packing and Amortized FHEW Bootstrapping.* ICALP 2018.

PREPRINTS & MANUSCRIPTS

Eric Eaton, Marcel Hussing, Michael Kearns, Jessica Sorrell. *Replicable Reinforcement Learning.* In submission.

Alan Kaminsky, Jessica Sorrell. *CryptoStat: a Bayesian Statistical Testing Framework for Block Ciphers and MACs.*

SELECTED TALKS

Stability is Stable.

- Charles River Privacy Days, May 2023
- Simons Institute Workshop on Lower Bounds, Learning, and Average-Case Complexity, February 2023

Reproducibility in Learning.

- Chicago Junior Theorists Workshop, January 2023
- INFORMS, October 2022
- Workshop on Learning and Economics, June 2022
- ToC4Fairness Seminar, April 2022
- TCS+, April 2022
- IAS CSDM Seminar, January 2022

Ring Packing and Amortized FHEW Bootstrapping. Simons Institute workshop on Lattices: From Theory to Practice, May 2020

TEACHING EXPERIENCE

Teaching Assistant for *Design and Analysis of Algorithms* Spring 2022
(University of California, San Diego, CSE 101)

Teaching Assistant for *Computability and Complexity* Fall 2021
(University of California, San Diego, CSE 200)

Teaching Assistant for *New Horizons in Theoretical Computer Science* June 2021

Teaching Assistant for *Advanced Cryptography* Fall 2020
(University of California, San Diego, CSE 208)

Teaching Assistant for *Lattice Algorithms and Applications* Fall 2019
(University of California, San Diego, CSE 206A)

Teaching Assistant for *Introduction to Modern Cryptography* Spring, Fall 2019
(University of California, San Diego, CSE 107)

Instructor for *Algorithmic Problem Solving* Summer 2018
(University of California, San Diego, Summer Program for Incoming Students)

Teaching Assistant for *Design and Analysis of Algorithms* Fall 2017
(University of California, San Diego, CSE 202)

Teaching Assistant for *Intro Statistics II* Spring 2015
(Rochester Institute of Technology, STAT 146)

	Teaching Assistant for *Calculus B* (Rochester Institute of Technology, MATH 172)	Fall 2014
PROFESSIONAL ACTIVITIES	Program Committee: Foundations of Responsible Computing	2023
	Reviewer: NeurIPS 2023, AISTATS 2023	
	Organizer: Women in Machine Learning Theory	2020
	Program Committee: IEEE Global Internet Symposium (GI 2017)	2017