Jessica Sorrell

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RESEARCH INTERESTS	Responsible computing, algorithmic fairness, learning theory, differential privacy, lattice-based cryptography
CURRENT POSITION	**University of Pennsylvania**, Philadelphia, PA Postdoctoral Researcher, Department of Computer and Information Science 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