

Sarah Hashash

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EDUCATION

Stanford University

2024 - Present

Ph.D. Institute of Computational & Mathematical Engineering

California Institute of Technology

2020 - 2024

B.S. Computer Science and Economics

GPA 4.1/4.0

Publications

Preprints

1. S. Dey*, D. Ebanks*, S. Hashash*, R. M. Alvarez. *Eroding Trust in Democracy: How Social Media Attacks on Election Officials in 2020 Undermined American Election Institutions*. In Polmeth 2022 and APSA 2023. In review *PRQ*. (**co-first**)
2. C. Pearson, A. Dakkak, C. Li, S. Hashash, J. Xiong, W. Hwu. *SCOPE: C3SR Systems Characterization and Benchmarking Framework*. CoRR abs/1809.08311 (2018).

Conference and Workshop Papers

1. N. Arora*, S. Hashash*, K. Hassibi*. *Enabling Computational Democratization: A Proof-of-Stake Bounty System for User-Proposed Problems and Solutions*. In MIT Undergraduate Research Technology Conference, 2023. (**co-first**)
2. C. Pearson, A. Dakkak, S. Hashash, C. Li, I. Chun, J. Xiong, W. Hwu. *Evaluating Characteristics of CUDA Communication Primitives on High-Bandwidth Interconnect*. In International Conference on Performance Engineering, 2019.

Journal Articles

1. C. Kann, S. Hashash, Z. Steinert-Threlkeld, R. M. Alvarez. *Collective Identity in Collective Action: Evidence from the 2020 BLM Protests*. In Journal Frontiers in Political Science, 2023.
2. C. Kann, S. Hashash, Z. Steinert-Threlkeld, R. M. Alvarez. *GatherTweet: A Python Package for Collecting Social Media Data on Online Events*. In Journal of Computer and Communications, 2023.

* denotes equal contribution.

Awards/Honors

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- NDSEG Fellow and NSF GRFP Awardee @ Stanford (2024)
 - Eleanor Searle Prize in Law, Politics, and Institutions @ Caltech (2024)
 - Best Paper Award @ IEEE MIT Undergraduate Research Technology Conference (2023)
 - Gee Family Poster Competition Finalist @ Caltech Summer Undergraduate Research Symposium (2021)
 - ML Research Bryant Family Fellowship @ Caltech (2021)
 - Best Research Award @ IBM-ILLINOIS C3SR Final Anniversary Celebration (2021)
 - Best Research Paper Award @ 10th ACM/SPEC International Conference on Performance Engineering (2019)

Industry Experience

Research Associate, Activision Blizzard April 2024 – June 2024

- Developed LLM tooling for codebase explainability and documentation generation for 1400 studio developers.
- Recruited for the joint tech and strategy role by CTO Michael Vance.

Managing Partner, Crescent Fund Sep 2022 – May 2024

- Wrote \$20K–\$50K pre-seed/seed checks from SoCal’s first student-run venture fund into student startups.
- Coordinated diligence and sourcing among 15+ partners and investors.
- Implemented training processes that increased deal flow from 200 to 600 per quarter.

Investment Engineering Intern, Bridgewater Associates June 2023 – Aug 2023

- Created an aggregate timely bank deposit rate representative for U.S. banks.
- Generated a business cycle gauge to capture economic cycle stages for the past 100 years.

Software Engineering Intern, Striveworks June 2022 – Sep 2022 & Aug 2023 – Sep 2023

- Hardened the Chariot ML Platform: tasks included vulnerability fixes for microservices, API gateway registration automation, testing, and security check automation (Docker, Kubernetes).
- Created a model to predict GPU and CPU resource requirements for 20+ different ML models.
- Decreased integration tests billable hours by 25% and runtime by 27–40%.

Quantitative Trading Wintern, Virtu Financial Jan 2022

- Created a risk-reward model for a capstone project to trade gas and oil stock utilizing data analysis and market research.
- Team placed 1st for best strategy.

Teaching Experience

Teaching Assistant

CS 1 Intro to Programming, CS 143 Networks: Algorithms & Architecture, CS 144 Networks: Structure & Economics, ACM 104 Applied Linear Algebra, PS 123 Regulation and Politics

Dean’s Tutor

CS 155 Machine Learning & Data Mining, Ec 11 Intro to Economics, Ma 3 Introduction to Probability and Statistics, CS 4 Fundamentals of Computer Programming

Leadership

President, Caltech Student Investment Fund Sep 2020–Present

- Managed a \$1M portfolio. Created new education curricula to bridge the knowledge gap for new members.
- **President (2023–2024)**: Led meetings, updated education curriculum, created mock portfolio competitions.
- **Treasurer (2022–2023)**: Executed all trades, interfaced between the Caltech Investment Office and the club.
- **Secretary (2022–2023)**: Wrote meeting notes on votes and proposals.

President, Caltech Lebanese Cultural Club Sep 2020–Present