Freddy Reiber

916.276.6879 | efreddyr@gmail.com | https://freddyreiber.info/ | Somerville, MA

EDUCATION

Doctor of Philosophy in Computing and Data Science — Boston, MA
Boston University — Sept. 2022 – Current

- **Research:** Human Computer Interaction, Labor and Technology, Union Organizing, Political Economy
- **GPA**: 3.8
- **Current Status**: Candidate

Bachelor of Science in Computer Science — Irvine, CA
University of California - Irvine — Aug. 2018 – June 2022

- **Specialization**: Algorithms
- **GPA**: 3.6
- **Coursework**: Data Structures, Algorithms, Algorithmic Game Theory, Graph Theory, Theory of Computation.

Research Papers

[1] Matthew Ferland et al. “Construction and Preliminary Validation of a Dynamic Programming Concept Inventory”. In: *Proceedings of the 56th ACM Technical Symposium on Computer Science Education V. 1*. 2025, pp. 325–331.

[2] Michael Luu et al. “What is an algorithms course? Survey results of introductory undergraduate algorithms courses in the US”. In: *Proceedings of the 54th ACM Technical Symposium on Computer Science Education V. 1*. 2023, pp. 284–290.

[3] Frederick Reiber. “Major developments in the evolution of tabletop game design”. In: *2021 IEEE Conference on Games (CoG)*. IEEE. 2021, pp. 1–8.

[4] Frederick Reiber. “The crew: The quest for planet nine is np-complete”. In: *arXiv preprint arXiv:2110.11758* (2021).

[5] Frederick Reiber et al. “Organizing in the Digital Age: Understanding Community, Challenges, and Consequences in Digitally-facilitated Labor Organizing”. In: *In review for CSCW 2026*. ACM. 2026.

[6] Frederick Reiber et al. “Surveillence, Spacing, Screaming and Scabbing: How Digital Technologies Facilitate Union Busting”. In: *To Appear in the Proccedings of CHI 2026*. ACM. 2026.

[7] Michael Shindler et al. “Student misconceptions of dynamic programming: a replication study”. In: *Computer Science Education* 32.3 (2022), pp. 288–312.

Experience

Boston University — Sept. 2022 - Present
Graduate Researcher — Boston, MA

- Lead and participated in a wide range of peer-reviewed research projects
- Conducted both qualitative and quantitative data analysis on numerous data sets
- Provide leadership and membership to undergraduate researchers

University of California — Jan. 2020 – June 2022
Course Grader and Reader — Irvine, CA

- Work in a small team to grade student responses
- Interact with students on a personal level to explain concepts and errors

- Expertise in C++ and Data Structure courses

Hewlett Packard Enterprise Intern/Aruba Networks June 2018 – Aug. 2018
High School Intern Roseville, CA

- Worked on a mobile application team working on Aruba - CX, an app for speeding up the initial configuration of Aruba - OS switches
- Professional experience with React Native, Objective C, and Java
- Competed in the Aruba Global Hackathon

Awards

Undergraduate Research Award 2022
Award for excellence in research during undergrad