

YIFEI SUN

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RESEARCH INTEREST

- Distributed systems related formal verifications and program analysis
- High-performance managed runtime systems
- Type theory and type based program analysis for modern programming languages

EDUCATION

Northeastern University

2023/09 - 2025/04

M.Sc. in Computer Science

Boston, MA, USA

Google CSRMP Fellow, 2023b

Member of the [Systems Research Group](#), Advisor: [Ji-Yong Shin](#)

University of Tokyo

2024/05 - 2024/09

Visiting Research Student

Tokyo, Japan

Member of the [Computing Software Group](#), Advisor: [Tomoharu Ugawa](#)

University of Utah

2019/08 - 2023/05

B.Sc. in Computer Science

Salt Lake City, UT, USA

Academic Excellence Scholarship, 2019-2023

Thesis: [System and Methods to Determine ME/CFS & Long COVID Disease Severity Using Wearable Sensor & Survey Data](#)

Member of the [Integrated Self-Powered Sensing Lab](#), Advisor: [Shad Roundy](#), Co-advisor: [Tucker Hermans](#)

EMPLOYMENT

Teaching Assistant, Northeastern University

2024/01 - 2024/05

- [CS 3700](#): Networks and Distributed Systems
- Topics include routing, congestion control, DNS, network security, and applications such as distributed KV stores, P2P and CDN

Research Assistant, University of Utah

2021/08 - 2023/05

- Joint research project in collaboration with the Bateman Horne Center's clinical research team, developed and managed a new data collection infrastructure
- The infrastructure aggregates 100+ IMUs, multiple single-board computers and high-performance servers, collected terabyte-level motion data, then applied sensor fusion, motion analysis, and machine learning techniques on collected time-series and survey data

System Administrator, University of Utah

2019/12 - 2020/09

- Enterprise system administration, managed 1000+ university-owned iOS/iPadOS/macOS/tvOS, Windows, and Linux systems

- Created multiple automation tools to perform unattended on-boarding, off-boarding, package licensing, updates, and distributions

Intern, DJI

2018/07 - 2018/08

- Competitive robotic system design/modeling, embedded system programming, control system programming, and computer vision
- Champion of the 2018 DJI RoboMaster Summer Camp

PROJECT

AS10779

as10779.net

- Operator of AS10779, 23.161.104.0/24 and 2620:BE:A000::/48

Consistency

github.com/stepbrobd/consistency

- A verification tool for testing the compositional consistency guarantees of distributed systems

Finch

github.com/stepbrobd/finch

- A genetic algorithm framework and visualizer written in Go

SRD

github.com/stepbrobd/srd

- Go static data race checking with stateful AST traversal based on structural operational semantics

PUBLICATION

- [1] **Y. Sun**, “System and Methods to Determine ME/CFS & Long COVID Disease Severity Using Wearable Sensor & Survey Data,” 2023.
- [2] **Y. Sun**, S. D. Vernon, and S. Roundy, “System and Method to Determine ME/CFS and Long COVID Disease Severity Using a Wearable Sensor.” Apr. 2024.