

EDUCATION

Bachelor of Science in Computer Science, Olin College of Engineering

Aug 2021 – May 2025

- **CGPA:** 3.88 / 4.00
- **Relevant Coursework:** Advanced Algorithms, Software Systems, Computational Robotics, Neurotechnology and ML, Data Science, Collaborative Design, Computer Architecture, Longer Term Software Development

SKILLS

- Python, Go, C, C++, Bash, JavaScript, SQL, Java, Kotlin, Dart, R
- Git, Github, Linux, Firebase, React.js, React Native, Ansible, Docker, ROS, MATLAB, AZ-900

PROFESSIONAL EXPERIENCE

Research Assistant, MIT CSAIL

Jun 2024 – Present

- Working at Professor Neil Thompson's [FutureTech lab](#) on the **Algorithm Wiki project**, a comprehensive online resource on algorithms and their development.
- Collaborating with cross-functional teams on **literature reviews and surveys to classify and quantify progress in machine learning** algorithms. This new project will help aid researchers in understanding trends and developing more efficient and scalable machine learning models.

Technical Lead, Senior Capstone Program in Engineering (SCOPE), Olin College

Sept 2024 - May 2025

- Collaborating with Boston University and Red Hat on prototyping **LLM**-powered agents for equitable literacy.
- Managing ML operations, including **RAG, model fine-tuning** and local/cloud deployment strategies, leveraging Llama as the base model.
- Designing proof-of-concept to support K-3 students with **personalized reading comprehension tools** using **generative AI**, focusing on inclusivity and regional dialects.

Researcher, MIT Connection Science

Feb 2024 – Present

- Working with Professor Alex Pentland's Connection Science group to research interoperability of **verifiable credentials (VCs)** and **personal data stores**.
- Acquired in-depth knowledge of **W3C standards** for VCs. This research has potential to shape standards for trustworthy and decentralized identity management.

Intern, Modular Open-Source Identification Platform (MOSIP)

Jan 2024 – May 2024

- Working on [INJI](#), a decentralized mobile wallet of MOSIP that enables users to download, manage, share, and verify OpenID conforming **verifiable credentials**.
- Improved the **open-source** Bluetooth credential exchange module (*Tuvali*) of INJI, allowing a presenter to select from a list of verifiers, enhancing the previous process of scanning QR codes to connect to verifiers.
- [MOSIP](#) is an open-source version of the [Aadhaar Technology Stack](#), and has helped issue digital IDs to more than **100 million people**, revolutionizing the delivery of social services and retail payments in the Global South.

Full Stack Developer (Volunteer), Community Knights (Non-Profit)

Jun 2023 – Dec 2023

- Assisted Community Knights to develop an accessible **ride-sharing platform** for vulnerable populations.
- Utilized **ReactJS, React Native** and **Firebase** to create applications with **CRUD** operations, **role-based authentication**, and Google Maps integration.
- Conducted **UX design** interviews to iteratively improve the applications.

Research Assistant, Affordable Design and Entrepreneurship, Olin College

Jun 2023 - Aug 2023

- Assisted statewide public defender agency in MA to help reduce convictions from racially biased traffic stops.
- Automated statistical report generation with **Quarto, pandas, and numpy**. Built **pytest** frameworks for sensitive data cleaning in parsing **thousands** of traffic stop records.

Research Assistant, Olin College Crowdsourcing and Machine Learning Lab

Jun 2022 – Aug 2023

- Created pipeline to benchmark **image matching algorithms** on data collected from **50+ co-designers** for the Clew app, which is an indoor navigation app for visually impaired users.
- Added **Protobuf** support for data logging and built a **LiDAR**-based benchmarking infrastructure in **Python**.

PROJECTS

- [Clipboard-Transformer](#): a simple tool to transform text in your clipboard. Built in **C++**.
- [Image Segmentation](#): separate images into distinct segments using **graph cut algorithms** and **network flows**. Built in **Python** with **NetworkX** and **OpenCV**.
- [Huffman Encoding](#): a compression algorithm implemented in **C++**.
- [CNN-MNIST](#): classifies handwritten digits from the **MNIST** dataset using only **NumPy** and **Python**.
- [Sudoku Solver](#): solves Sudoku puzzles using the Simulated Annealing algorithm. Implemented in **Python**.
- [Hole-in-the-camera](#): digitized the game show "Hole in the Wall" using **OpenCV, PyGame, and OpenPose**.

EMPLOYMENT, LEADERSHIP AND INTERESTS

- **Teaching Assistant** - Agency, Ethics and Biology
- **Resident Advisor** - Olin College of Engineering
- **Sub-team Lead** - Public Interest Technologies club, Olin College of Engineering
- **Secretary** - Olin South Asian Student Organization
- **Student Worker** - Office of Strategic Communication, Olin College of Engineering
- **Interests** - Rock Climbing, Badminton and Swimming