



EDUCATION

Brown University, Sc.B in Computer Science

GPA: 3.94/4.0

Providence, RI Expected graduation 2026

Relevant coursework: Computer Networks, Computer Systems, Software Engineering, Computational Linguistics, Data Structures and Algorithms, Data Science, Object-Oriented Programming, Structures and Probability, Linear Algebra, Statistical Inference.

RESEARCH & PROJECTS

AI Robotics Ethics Society @ Brown | Co-President

Sep. 2022 - Present

 Developed the AI Ethics tool, which uses algorithmic impact assessment to guide software engineers to incorporate ethics inside AI system development. Collaborated with 2 postgraduate researchers in <u>Pontifical Catholic University</u>, Brazil.

$Virtual\ Internet\ Protocol\ |\ Go$

Oct. 2024

• Developed a custom Virtual IP Network, implementing IP forwarding and routing, using UDP sockets to simulate packet transmission. Integrated RIP routing protocol with poison reverse and split horizon to enhance network efficiency.

Mock Internet Radio | Go

Sep. 2024

• Developed a mock internet radio in Go, handling multi-threaded TCP connections to a client and streaming UDP data over correlated client listeners from a server.

Redlining Maps | Typescript, React, Java

Apr. 2024

 Developed full stack web mapping application overlaying redlining data with user authentication, dynamic pin storage, and data management using Firebase.

American Community Survey (ACS) Data Connector | Typescript, React, Java

Mar. 2024

• Designed a web app to display API calls to ACS data. Integrated Firebase for authentication and prioritized accessibility via keyboard shortcuts and screen reader compatibility.

Thread-Safe Database | C

Dec. 2023

• Built a multi-threaded client server in C to handle multiple concurrent users over a network, implementing search, addition, and deletion capabilities.

Mock C Shell | C

Oct. 2023

 Developed a Unix-like shell in C, implementing core functionalities such as command parsing, process execution, I/O redirection, and pipeline operations.

PROFESSIONAL EXPERIENCE

Consolidated Edison | New York, NY

May 2024 - Aug. 2024

Enterprise Architecture Intern

- Visualized internal processes within Enterprise Architecture and identified redundancies, streamlining the technology approval process.
- Conducted research and created documentation for corporate data center development, contributing to company-wide data center build standards.
- Developed internal guidelines on mitigating security vulnerabilities through secure coding practices.

Brown University Department of Computer Science | Providence, RI

Undergraduate Teaching Assistant

May 2023 - Present

- Perform code reviews, hold technical and conceptual office hours, and grade projects.
- Research, craft and deliver biweekly mini-lectures on socially responsible computing under the guidance of <u>Prof. Van Dam.</u>
- Hold weekly lab for ~20 students, teach essential object-oriented programming, data structure, and algorithm skills.

Ashoka | Remote

May 2023 - Aug. 2023

Data Analytics Intern

• Conduct qualitative and quantitative analysis using STATA on surveys from executive leaders of non-profit organizations. Identified, complied, and tracked User Feedback KPIs for the company's annual investor report.

SKILLS & INTERESTS

Programming Languages: C, Go, x86 ASM, Java, Python, SQL, TypeScript, React, HTML/CSS.

Languages: Intermediate-High Chinese (ACTFL certified). Novice-High Arabic (ACTFL certified). Conversational Urdu.

Tools & Frameworks: Git, Docker, Pandas, NumPy, Terraform, Wireshark, Linux, VSCode, IntelliJ, Microsoft 365.

Interests: Scenic hiking, pastry baking, embroidery, mystery novels.