

FAIZAH NAQVI



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<https://ffnaqvi.github.io/>

EDUCATION

Brown University, ScB in Computer Science

GPA: 3.95/4.0

Providence, RI
Expected graduation 2026

Relevant coursework: Software Engineering, High Performance Network Systems, Systems Security, Applied Cryptography, Computer Networks, Computer Systems, Computational Linguistics, Data Science, Data Structures and Algorithms, Object-Oriented Programming, Linear Algebra, Statistical Inference.

SKILLS & INTERESTS

Programming Languages: TypeScript, C++, HTML/CSS, Python, Java, Go, C, C++, Rust, SQL, React, YANG.

Tools & Frameworks: Git, Docker, Wireshark, LinuxPandas, NumPy, Seaborn, TensorFlow, PyTorch, Scikit-learn, gNMIc, OpenConfig, gNOI.

Activities: Women in Computer Science (Mentor), Muslim Students Association (Program Lead), Community Coordinator (First-Year Experience).

Certifications: JCNIA-Junos

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

PROFESSIONAL EXPERIENCE

Juniper Networks | Sunnyvale, CA

May 2025 – Aug. 2025

Test Engineering Intern

- Validated OpenConfig and gNMI compliance for ~7,000 xpaths across multiple Junos releases used by major enterprise customers.
- Configured and tested routers in virtual topologies; filed bug reports impacting 100+ xpaths across key YANG models.
- Debugged and contributed fixes to Juniper's internal testing automation tool, improving test coverage and reliability for all YANG-based models.

Consolidated Edison | New York, NY

May 2024 – Aug. 2024

Enterprise Architecture Intern

- Designed a company-wide framework to mitigate security vulnerabilities throughout the software development life cycle, focusing on the OWASP Top Ten.
- Researched, evaluated, and recommended hardware aligned with ConEd data center specifications, standardizing infrastructure across the company.

Brown University Department of Computer Science | Providence, RI

May 2023 – Present

Undergraduate Teaching Assistant

- Work closely with ~20 colleagues to perform code reviews, hold technical and conceptual office hours, and grade projects on core systems and algorithm topics.
- Collaborated directly with [Prof. Van Dam](#) to research, craft and deliver biweekly mini-lectures on socially responsible computing to ~400 students.

RESEARCH & PROJECTS

Virtual Internet Protocol | Go

Nov. 2024

- Developed a custom Virtual IP and TCP 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. Optimized packet transmission through sliding window mechanisms, retransmissions, and zero-window probing.

Low-Latency Network System | Rust

Mar. 2025

- Implemented and analyzed a high-performance TCP client-server application with I/O ring optimizations for open-loop request generation, minimizing latency and analyzing the system throughput.

Redlining Maps | Typescript, React, Java

Apr. 2024

- Led classmates in developing full stack web mapping application overlaying redlining data with user authentication, dynamic pin storage, and cookie management using Firebase

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

Apr. 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.

AI Robotics Ethics Society @ Brown | Co-President

Sep. 2022 - Present

- Collaborated with postdoc researchers from [Pontifical Catholic University](#), Brazil to develop a framework that evaluates model risk for software developers. Led team of undergraduates to conduct a study measuring the impact of technology ethics education within the Brown University Computer Science Department.