FAIZAH NAQVI

☎ (732) 567-5976   ✉ faizahnaqvi@gmail.com   🌐 https://ffnaqvi.github.io/

EDUCATION

Brown University   Providence, RI
Bachelor & Master of Science in Computer Science | **GPA:** 3.95/4.0   *Expected graduation* May 2026
Relevant coursework: Computer Systems, High Performance Network Systems, Systems Security, Database Management, Applied Cryptography, Blockchains & Cryptocurrency, Deep Learning/AI.

SKILLS & INTERESTS

Programming Languages: Rust, Go, Python, C++/C, SQL, Java, Typescript.
Tools & Frameworks: Linux, Git, Docker, Wireshark, GDB, OpenConfig/gNMIc, Cursor (AI).
Certifications: JCNIA-Junos

PROFESSIONAL EXPERIENCE

Juniper Networks | *Sunnyvale, CA*   May 2025 – Aug. 2025
Software Engineer Intern (Test Engineering)

- Spearheaded validation of Juniper's software for industry compliance (gNMI and OpenConfig) across ~7,000 features in multiple Junos releases.
- Built and tested virtual router topologies, uncovering and reporting bugs that impacted over 100 features across software releases for Juniper's top-tier clients.
- Designed and implemented containerized Go applications for Juniper routers, including a gRIBI proxy that enhanced reliability of programmable routing pipelines.

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 – May 2025
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

Brown University Systems Research Group | *C, Rust*   Sep. 2025 – Present

- Design and develop a novel interface that translates SQL-like queries into highly optimized, safe programs that run directly on the kernel (eBPF).
- Conduct systems research under Professor Malte Schwarzkopf as part of the Efficient and Trustworthy Operating Systems Group; work with postdoc researchers on kernel-level observability.

AI Robotics Ethics Society @ Brown | *Python*   Sep. 2022 – Present

- Co-author of *Crossing the Principle–Practice Gap in AI Ethics with Ethical Problem-Solving*. Developed a framework that evaluates model risk for software developers.
- Led team of five undergraduates to conduct a study measuring the impact of technology ethics education within the Computer Science Department.

SELECTED PROJECTS

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.

Multithreaded Streaming Server | *Go*   Sep. 2024

- Designed and implemented a concurrent client–server system that simulated an internet radio, managing parallel TCP connections and streaming real-time UDP audio data to synchronized clients.

American Community Survey (ACS) Data Connector | *Typescript, React, Java*   Apr. 2024

- Designed a web app to display API calls to ACS data. Prioritized accessibility via keyboard shortcuts and screen reader compatibility