

Education

Northeastern University, Boston, MA

September 2022 – Expected May 2026

Khoury College of Computer Sciences: *Candidate for Bachelor of Science in Computer Science, Concentration in Systems*

GPA: 3.6/4.0

Courses: Object-Oriented Design, Algorithms and Data, Computer Systems, Network Fundamentals, System Security

Activities/Extracurricular: Northeastern Electric Racing, Oasis, ColorStack, Northeastern Wireless, CTF Club

Experience

UKG, Lowell MA

September 2024 – December 2024

Software Engineer Intern

- Demonstrated outcomes to 40+ stakeholders across timekeeping teams, gaining buy-in and ensuring knowledge transfer to team members.
- Designed and implemented performance tests for timekeeping accrual APIs, benchmarking employee and position-level accruals under various configurations.
- Assisted our internal Seahawks team in identifying and resolving a database defect by developing Postman test suites to ensure accurate version control in labor category profiles.

Sponsors for Educational Opportunity, Remote

June 2024 – August 2024

Tech Developer Intern

- Completed 300+ hours of rigorous computer science and software engineering training, focused on data structures, algorithms, and full stack web development.
- Gained software development skills by working in SCRUM-like teams to design, test, and implement full-stack applications using Python(Flask), MySQL, HTML, JavaScript, CSS, and API integrations.
- Participated in long-term career preparation and mentorship programs to develop professional skills.

Northeastern Electric Racing Club, Boston MA

September 2023 – April 2024

Software Developer

- Resolved and pushed multiple features and bugs released in recent Club website release with close to 1 thousand active members.
- Developed a controller in C++ to facilitate the transfer of data modified by the model to the views created
- Participated in weekly standup meetings, swiftly addressing GUI challenges to promote efficient problem-solving within the team.

Projects

DNS Server | *Python, UDP Sockets, Network Programming*

April 2025

- Designed and implemented a secure recursive DNS server in Python, acting both as an authoritative nameserver and a recursive resolver for local clients.
- Enforced strict TTL management and glue record handling to maintain DNS response integrity and mitigate security risks in delegation chains.
- Developed defenses against DNS vulnerabilities, including cache expiration handling and recursion control, ensuring correct authoritative behavior and safe recursion.

Proxmox Virtualization | *Proxmox, Linux, SSH, Bash Scripting, VM Management*

January 2025

- Repurposed an old laptop by installing Proxmox to create a virtualization environment for hosting multiple VMs, including Immich (photo storage), Jellyfin (media server), Kali (security testing), and Fedora (Apple's enclave simulation)
- Configured SSH access to enable terminal management alongside Proxmox's web UI for more flexible server control.
- Developed a custom script to monitor battery levels, send alerts for low battery, and prevent laptop screen saver from interrupting server uptime.

Technical Skills

Languages: Java, Python, JavaScript, Typescript, C++, QML, HTML/CSS, C, Kotlin, SQL, Assembly

Developer Tools: Qt, VS Code, IntelliJ, PyCharm, Git, BurpSuite, Jenkins, JUnit, WireShark, Nmap

Technologies/Frameworks/OS: React.js, Linux, Windows, Nextjs, Docker, Supabase, Node.js

Interests: Playing soccer and basketball, cooking, reading, and playing video games