

Fatuma Ilmi

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OBJECTIVE

Junior Computer Science & Engineering student with a passion for backend development, system optimization, and full-stack engineering. Seeking a Summer 2025 Software Engineering Internship to apply expertise in C, Java, and scalable web architectures to build high-impact solutions.

EDUCATION

The Ohio State University: Columbus, OH
B.S. Computer Science & Engineering

Expected Graduation: May 2026

TECHNICAL SKILLS

- **Programming Languages:** C++, C, Java, Python, JavaScript (ES6+), Ruby, HTML5, CSS3
- **Frontend:** React.js (Hooks, Context API), HTML5, CSS3
- **Backend:** Node.js, Express.js, Spring Boot, REST APIs, MySQL, SQL
- **Systems & Performance:** Unix/Linux, Memory Management, x86 Assembly, Bash Scripting
- **Tools & Debugging:** Git, Subversion, Makefiles, GDB, JUnit, Jest, Valgrind
- **Relevant Coursework:** Software I & II (software design, data representation, debugging in Java), Data Structures & Algorithms (sorting, searching, hashing, graph algorithms), Systems I (low-level programming in C, memory management, debugging in GDB), Systems II (Spring 2025: Operating System Concepts), Web Applications (Spring 2025: Full-Stack Web Development), Linear Algebra (Spring 2025).

INTERNSHIP EXPERIENCE

Software Engineering Intern — Southwestern Ambulance Services LLC – Columbus, OH *Summer, 2024*

- Developed a responsive web portal using HTML5, CSS3, and JavaScript, reducing scheduling time by 30%.
- Engineered a Java-based backend for appointment booking and dispatch, cutting manual processing by 40%.
- Optimized JSON-based data handling, improving response times by 35%. Implemented authentication and role-based access control (RBAC) to enhance security.
- Established a comprehensive test suite using JUnit and Jest, ensuring 99.5% system uptime.

PROJECT EXPERIENCE

Hackathon 2024: Real-Time Parking Website — HackOH/IO - Columbus, OH *October 8-9, 2024*

- Led a team of 4 in developing a real-time parking availability tracker, reducing parking search times by 60%.
- Developed a Java-based backend and a React.js frontend, integrating with a MySQL database.
- Designed a scalable system using priority queues and hashing, processing 1,000+ sensor updates per minute.

Pizza Delivery System Backend Development — Academic Project *November - December 2024*

- Built a modular C-based backend for a pizza delivery system, optimizing runtime by 25%.
- Implemented efficient memory allocation and Unix-based development practices to enhance maintainability.
- Used Valgrind to identify and resolve memory leaks, improving system stability.

LEADERSHIP AND PROFESSIONAL INVOLVEMENT

Girls Who Code (GWC) — The Ohio State University - Columbus, OH *Member, 2024 – Present*

- Mentored 3 junior members in Java and C, guiding them through data structures and debugging techniques.
- Participated in coding challenges and technical workshops, improving algorithmic problem-solving skills.

Society of Women Engineers (SWE) — The Ohio State University - Columbus, OH *Member, 2022 – Present*

- Led a workshop on debugging in C, helping peers identify segmentation faults and optimize memory usage.
- Networked with industry professionals and participated in technical resume review sessions.

Mount Leadership Society — The Ohio State University - Columbus, OH *Member, 2020 – Present*

- Organized food drives, providing 200+ community members with essential supplies.
- Led senior brunch services for 50+ individuals at the Clintonville-Beechwood Community Resource Center.