WEB ENGINEERING EXPERIENCE

Recent Skill Acquisition

In the past year, I learned Tailwind CSS for its ease of use and industry relevance. Its utility first approach simplifies styling, enabling rapid creation of attractive, responsive designs. I was motivated by its growing adoption for crafting user-friendly interfaces and its ability to streamline development. In the Great Designs e-commerce project, Tailwind CSS reduced styling time compared to traditional CSS, resulting in visually appealing UI/UX, animated sections, and faster iterations, enhancing team efficiency and client satisfaction.

Web Programming Experience

My web development expertise includes HTML, CSS, JavaScript, React, and Python. I've used JavaScript and React extensively in projects like Axon Stroke Foundation, Emun Community, and Great Designs, building dynamic front-end interfaces. For CSS, I've leveraged Bootstrap and Tailwind CSS, as seen in LiqLearns, to create responsive layouts. Python with Django powers my back-end work, such as in LiqLearns, where I implemented scalable data management. Ive explored TypeScript briefly while learning React, and my strong JavaScript foundation enables quick adaptation to TypeScript as needed.

Large Systems Development

I was involved in the development of LiqLearns, my first large-scale system, integrating a Bootstrap front end, Django back end, and SQLite database via REST APIs. A key challenge was designing a clear architecture to handle learning management features, which I addressed by modularizing components for scalability. I ensured maintainability through clean, documented code and reliability via robust error handling. Currently, Im working on a hotel management system using React and Django, further refining my skills in managing complex integrations. Key considerations include:

- Architecture: Modular designs for scalability and clear separation of concerns.
- Maintainability: Consistent code structure and documentation for team collaboration.
- Reliability: Error handling and testing to ensure system stability.

SOFTWARE ENGINEERING EXPERIENCE

Software Projects

My projects span various technologies:

- Operating Systems: Primarily Windows for development, with Ubuntu experience in a virtual machine for shell programming (Operating Systems course). I'm comfortable adapting to Linux-based environments as needed.
- Languages/Frameworks: Python (Django), JavaScript (React), Dart (Flutter), HTML, CSS (Bootstrap, Tailwind).
- Databases: MySQL, Firebase.
- Web Apps: LiqLearns (e-learning), Great Designs (e-commerce), Novagebeya.com (ecommerce).
- Mobile: CarGuard (Flutter-based car anti-theft app).
- Games: Ethiopian cultural game (2024), using Waterfall development.

• Open-Source Development

I'm passionate about open-source software for its collaborative innovation. While I haven't directly contributed to open-source projects, I've studied frameworks like Django and React, applying their best practices to my projects. I'm eager to contribute to Canonicals open-source ecosystem, leveraging my skills in clean code and documentation to support community-driven development.

Proudest Success

My proudest achievement is LiqLearns, a large-scale e-learning platform for teaching Amharic to children. I overcame challenges in architecting a scalable system to meet client requirements for dynamic content management. Leading full-stack development with Django, Bootstrap, and MySQL, with my team we delivered an engaging, user-friendly platform, earning positive client feedback for its impact on education.

Software Quality

Quality is driven by:

- Testing: Unit and integration testing, as in the Ethiopian game project, to ensure functionality.
- Agile Practices: Iterative development with feedback loops, used in CarGuard and game projects.
- Code Standards: Consistent formatting and documentation for maintainability.

These practices improved reliability and team collaboration across my projects.

EDUCATION

High School Performance

In high school, I excelled in mathematics, physical sciences, and computing, with mathematics being my favorite due to its problem-solving nature. I consistently performed at a high level across these subjects, preparing me for engineering studies.

Leadership Roles

While I didn't hold formal leadership titles, I demonstrated leadership through various team projects. Notably, I took the lead during the planning phase, specifically in the architectural and high-level design, of our Ethiopian game development project. I also played a key role in coordinating tasks for the Car Import Management System, where I fostered team collaboration and helped drive consistent progress.

University Choice

I chose Addis Ababa University, Ethiopia's top institution, for its strong engineering programs. From the beginning, my goal was to pursue either Software Engineering or Computer Engineering, as both fields align with my passion for computers and coding. Although I was placed in Electrical and Computer Engineering instead of Software Engineering, I used the opportunity. I took the initiative to teach myself programming alongside my coursework to stay aligned with my career goal of becoming a skilled developer. And finally, I have achieved it by becoming a Computer Engineer.

University Achievements

I'm on track to graduate in June 2025 with a strong academic record. My standout achievement is Car Guard, a Flutter-based mobile app and embedded system for car security, featuring real-time tracking and access control, showcasing my ability to deliver innovative solutions.

CONTEXT

Canonicals Mission

Canonicals focus on enterprise solutions and open-source innovation, particularly through Ubuntu, excites me for its global impact and accessibility. I'm drawn to contributing to tools that empower developers worldwide. However, I'm curious about how Canonical balances commercial interests with open-source community goals.

Desired Change

I would propose Canonical expand outreach to emerging markets like Ethiopia, fostering local developer communities through workshops and open-source initiatives. This could drive adoption and cultivate diverse talent, aligning with Canonicals global mission.

• Excitement for the Role

The Web Developer role at Canonical excites me for its focus on open-source projects with global reach. Contributing to tools used by developers and organizations worldwide aligns with my goal of becoming a technically proficient, community-driven developer. Canonicals commitment to engineering excellence and remote collaboration offers an ideal environment to grow and make a meaningful impact.