

Fireweld Tesfaye

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Education

Bachelor of Science in Computer Science and Engineering (CSE),

Mar 2023 – Jun 2026 | Adama, Ethiopia

Adama Science and Technology University -[link](#)

- Graduated from an **ABET-accredited program**, offering a curriculum that adheres to top-tier engineering education standards.
- **Relevant Coursework:** Advanced Java, Object-Oriented Programming, Data Structures and Algorithms and Fundamental of Programming(C++).

Competitive Programming and coding academy,

- **Africa To Silicon Valley | ASV - Backed by Google (twice) -[link](#)** **Dec 2026 – present| Adama, Ethiopia**
 - Student at A2SV with a strong understanding of Data Structures and Algorithms(solved 400+ problems on LeetCode and Codeforces) dedicating more than 300hours.
- **Front-End Engineering, ALX Africa-[link](#)** **Aug 2024 – Sep 2025, remote**
 - Completed intensive training in modern front-end development, focusing on HTML, CSS, JavaScript, and React. Built responsive, user-centric web applications, integrated APIs, and applied best practices in version control, UI design, and collaborative development.
 - Acquired professional digital technology skills focused on empowering young learners to confidently navigate, understand, and engage with modern technological tools and platforms

Experience

Full Stack Engineering | Freelancing | hybrid| 2024-Present

- Developed end-to-end web and mobile applications using modern frameworks such as React, Node.js, and Flutter, delivering scalable solutions for diverse clients.
- Collaborated with clients to define project requirements, translating technical needs into functional, user-centric interfaces.
- Managed the full development lifecycle, from system architecture design and database integration to deployment and ongoing maintenance.

ML Systems Engineer | [African To Silicon Valley](#) |Remote| Jan 2023 – Dec 2025

- Implemented a custom torch.autograd.Function with hand-written CUDA forward/backward kernels for a fused attention variant, reducing inference latency by 22% compared to the eager PyTorch baseline.
- Contributed a bug fix to the PyTorch core (torch/csrc/autograd), resolving a gradient accumulation race condition under torch.compile.
- Built a tensor extension registering custom ATen operators through TORCH_LIBRARY and exposed them to Python with pybind11 for production training pipelines.

AI Trainer | [Revelo](#) | Remote | Jan - may 2026

- Leveraged full-stack engineering expertise to evaluate, test, and debug AI-generated code while fine-tuning LLMs via RLHF to improve model accuracy.

AI Trainer | [AfterQuery](#) | Remote | May 2026 – Present

- Led data annotation initiatives and analyzed model performance metrics to identify edge cases and optimize AI architectures.

AI Scholar | Sovrano AI | Remote | Aug 2026 – Present

- Contributed to AI training projects involving robotics and motion data.
- Applied strict quality training data and built experience in AI data annotation.

Mobile Developer-Intern | African To Silicon Valley | Adama, Ethiopia | May 2026 – Present

- Spearheaded the end-to-end development of AI-integrated cross-platform applications using Flutter and Dart, overseeing software architecture and the integration of on-device machine learning inference.
- Led a team of mobile developers through the full development lifecycle, ensuring high-performance code, responsive UI/UX, and robust project delivery.

Projects

- **Document Search Engine-[Link](#)**
Developed a document search tool using **TypeScript** that enables keyword-based searching within uploaded documents, allowing users to quickly locate relevant information through efficient text-matching techniques.
- **Fitness Tracker App-[Link](#)**
Developed a fitness tracking application using **React** that calculates calories burned based on selected sports and activity duration, providing users with simple activity tracking.
- **Student & Teacher Attendance Tracking System (ASTAS)-[Link](#)**
Contributed to requirement engineering and system documentation for an attendance management system designed for teachers in the **Adama Science and Technology University** Computer Science and Engineering department, collecting real-world requirements and translating them into structured system specifications.
- **Recipe Sharing App-[Link](#)**
Built a responsive recipe-sharing web application using **React** that allows users to browse and view food recipes in a structured and user-friendly interface.
- **E-commerce App**
Developed a fully functional e-commerce mobile application using **Flutter** and **Dart**, featuring a clean, responsive UI, product catalog, and cart management system to provide a seamless shopping experience.
- **Besot**
Developed a mobile application using **Flutter** and **Dart** that provides a secure, anonymous platform for adults to express their thoughts and vent, ensuring user privacy and a safe emotional outlet.
- **Afya**
 - Developed the clinical history, encounter timeline, and appointment modules for the patient mobile application using **Flutter** and **Clean Architecture**.
 - Implemented features for viewing chronological clinical visits, condensed medical summaries, and standalone appointments, providing a secure and read-only experience for users.
- **University Mini Projects**
Completed multiple academic projects focused on programming fundamentals, data structures, and basic web development concepts.

Skills

Languages: Python, Dart, TypeScript/JavaScript, C++, Java

ML/AI: PyTorch, CUDA, LLM Fine-tuning, RLHF

Frameworks/Tools: Flutter, React, Next.js, Node.js, TailwindCSS, Git, GitHub, Linux, MongoDB, MySQL

Leadership

- **Student & Teacher Attendance Tracking System (ASTAS)**
 - Led the requirements engineering and documentation process, coordinating team efforts to gather, analyze, and structure real-world requirements from stakeholders. Drove the translation of user needs into clear system specifications, ensuring alignment between project goals and implementation while facilitating collaboration and decision-making within the team.

Awards and Certificates

- A2SV software engineering trainee
- ALX,Africa Front engineering-[link](#)
- ALX, Professional foundation-[link](#)
- Coursera, Introduction to web development-[link](#)