

# HAILEMARIAM AGABZIE HAILU

**Full-Stack Engineer | Web, App**

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## EXECUTIVE SUMMARY

**Full-Stack Engineer** with 3+ years of experience designing, developing, testing, and deploying **web and mobile applications**, **RESTful APIs**, and software platforms. Experienced in **full-stack development** using **Node.js**, **Express.js**, **TypeScript**, **React**, **Next.js**, **PostgreSQL**, **MySQL**, **Tailwind CSS**, **React Native**, and **Flutter**. Experience delivering software solutions for organizations including the **Ethiopian Optometric Association**, **Askuala Link**, **BiTech**, **XAI**, and **EdTech** platforms, with experience in **backend development**, **database design**, **API development**, **responsive web development**, **cross-platform mobile development**, and **software architecture**. Strong focus on **clean code**, **maintainability**, **application performance**, **security**, and **user experience**. **Founder**, **hackathon organizer**, and **technical mentor**, actively involved in **technology communities** and **collaborative software development** across East Africa and remote teams.

## EDUCATION

### Bachelor of Science in Information Systems

**Bahir Dar Institute of Technology (BiT), Bahir Dar University**

- **Relevant Coursework:** Data Structures & Algorithms, Object-Oriented Programming (OOP), C++, Java, C#, Python, JavaScript, Machine Learning, Mobile App Development, Operating Systems.
- **Key Highlights:** Recognized for **Best Top 3 Internship Project of 2025** and **3rd Place Winner** at BiT AI Hackathon.
- **Student Leadership:** Founder & Lead of *Meta Codz BiT*, Lead Organizer of *Cursor Hackathon*.

### Scholarships & Intensive Technical Certifications

- PLP Software Development Scholarship — *Power Learn Project*
- Backend Bootcamp Engineer Certification — *IS HUB, Addis Ababa University*
- Fundamentals of Web Development Certification — *Udacity*
- English Language & Professional Communication Trainee — *ELIC*
- Leadership & Strategy Programs — *Various Leadership Development Initiatives*

## WORK EXPERIENCE

### Full-Stack Engineer

**Ethiopian Optometric Association | Sep 2025 — Present**

- Architected and deployed the official full-stack web platform powering digital operations, admin management tools, and member services across Ethiopia.
- Engineered secure **Role-Based Access Control (RBAC)** authentication (JWT, OAuth) and automated digital credentialing with dynamic **PDF generation (PDFKit)** and **QR code verification**.
- Optimized database architecture using MySQL and Sequelize ORM, integrating Cloudinary for asset storage and automated cloud backups.

### Project Team Lead, Web Developer & UI/UX Designer

**BiTech Incubation Center | May 2025 — Jul 2026**

- Lead multidisciplinary engineering and design team in developing software products for incubated tech startups.

- Direct visual identity, UI/UX prototyping (Figma), and full-stack web development across multiple concurrent projects.
- Facilitate stakeholder planning, sprint retrospectives, and technical architecture reviews.

### Frontend & SEO Developer / Full-Stack Intern

Askuala Link | *Jul 2025 — Mar 2026*

- Frontend & SEO Developer (*Oct 2025 — Mar 2026*): Engineered responsive frontend interfaces and implemented SEO best practices (meta tags, site indexing, Core Web Vitals) for the main public portal (askualalink.com).
- Full-Stack Developer Intern (*Jul 2025 — Oct 2025*): Architected Askuala Wiki, an internal knowledge platform built with React 19, Tailwind CSS v4, Zustand, Node.js, Express, MySQL, and Cloudinary.
- Awarded special commendation by Founder & CEO for outstanding technical contributions and innovation.

### Backend Developer Intern

Alyah Software | *Jun 2025 — Aug 2025*

- Built the backend services and API infrastructure for **Hintern Bridge**, an internship-matching platform connecting university students with tech companies.
- Developed scalable RESTful APIs, database models, and intelligent candidate-matching logic.

### Co-Founder & CTO

Code Biruh | *2024 — 2025*

- Directed technical strategy, client web development projects, and curriculum design for developer training programs.
- Trained aspiring developers in core programming principles while delivering custom web solutions for local businesses and organizations.

### Web Development Intern

Oasis Infobyte | *Remote, India | Feb 2025 — Mar 2025*

- Developed web applications solving real-world client requests in an agile, remote environment.

### Web Development Intern

XAI | *Remote, Morocco | Dec 2024 — Jan 2025*

- Contributed to front-end and back-end web features for international clients with high performance standards.

## SKILLS

- **Programming Languages:** TypeScript, JavaScript, Python, C++, Dart, SQL, HTML5, CSS3
- **Frontend Engineering:** React, Next.js, Nuxt.js, React Native, Flutter, Tailwind CSS (v3 & v4), Zustand, Framer Motion, Radix UI, Responsive & Accessible UI/UX Design
- **Backend Engineering & Databases:** Node.js, Express.js, PostgreSQL, MySQL, Prisma ORM, Sequelize ORM, RESTful APIs, WebSockets, GraphQL, Flask, g++ Live Compiler Integration
- **DevOps & Infrastructure:** Docker, AWS, GitHub Actions, Vercel, cPanel, Yegara Host, CI/CD Pipelines
- **Auth & Security:** Better Auth, JWT, OAuth 2.0, Role-Based Access Control (RBAC), Session Management, OWASP standards
- **AI & Data Science:** AI API Integration (Gemini AI, OpenAI), scikit-learn (IsolationForest anomaly detection), NumPy, Pandas, Data Analytics & Visualization
- **UI/UX & Creative Tools:** Figma, Adobe XD, Illustrator, Premiere Pro, After Effects, Brand Identity Systems, Motion Graphics

## PROJECTS

## 1. Ethiopian Optometric Association Platform

- **Description:** Enterprise full-stack digital operational system featuring role-based dashboards, membership management, dynamic payment audit workflows, automated PDF document issuance, and instant QR-based ID authentication.
- **Tech Stack:** React, Node.js, Express.js, MySQL, Sequelize, JWT, Cloudinary, PDFKit, QRCode, Tailwind CSS
- **Live Demo:** [ethiopianoptometricassociation.org](https://ethiopianoptometricassociation.org)

## 2. AlphaX EdTech & Interactive Coding Platform

- **Description:** Bilingual (Amharic/English) learning platform for C++ & web fundamentals featuring structured interactive lessons, placement tests, g++ live browser compiler, AI tutor (Gemini/OpenAI), WebSockets, and Chapa payment integration.
- **Tech Stack:** Next.js, React, TypeScript, Node.js, Express, MySQL, WebSockets, Gemini AI, g++ Compiler, Chapa Pay
- **Live Demo:** [alpha-x-frontend.vercel.app](https://alpha-x-frontend.vercel.app)

## 3. Askuala Link Official Platform

- **Description:** an AI powered Smart School system, collaborating with the development team to build and refine a high-performance, responsive experience. Implemented dynamic content experiences, modern UI improvements, SEO enhancements, and performance optimizations to deliver a polished, production-ready platform across devices.
- **Tech Stack:** React, Next.js, Tailwind CSS, JavaScript, SEO (Meta/OpenGraph), Core Web Vitals, REST APIs
- **Live Demo:** [askualalink.com](https://askualalink.com)

## 4. Tenashi AI Health Monitor

- **Description:** AI-driven health monitoring application featuring scikit-learn IsolationForest anomaly detection, NumPy/Pandas real-time metrics processing, and Docker containerized services.
- **Tech Stack:** React, Vite, Chart.js, Python, Flask, scikit-learn, NumPy, Pandas, Docker

## 5. Askuala Wiki

- **Description:** High-performance internal knowledge wiki engineered with React 19, Zustand state store, Node.js REST APIs, and Cloudinary media pipelines.
- **Tech Stack:** React 19, Tailwind CSS v4, Zustand, Node.js, Express.js, MySQL, Sequelize, Cloudinary

## 6. Yene Temari (Top 10 Finalist — Innovation for Peace 2025)

- **Description:** AI-assisted tutoring platform providing intelligent tutor matching, profile verification, and student learning analytics.
- **Tech Stack:** Python, React, AI Matching Algorithms, REST APIs

## 7. Hintern Bridge Internship Platform Backend

- **Description:** Production backend infrastructure handling student application pipelines, recruiter portals, and matching algorithms.
- **Tech Stack:** Node.js, Express.js, REST APIs, MySQL

## COMMUNITY IMPACT & EXTRACURRICULAR LEADERSHIP

- **Founder & Community Lead — Meta Codz (BiT) (Jun 2025 — Jun 2026):** Founded and led a thriving student technology community at Bahir Dar Institute of Technology. Organized technical workshops, guest lectures, expert interviews, and multidisciplinary project showcase events for 100+ student developers.
- **Hackathon Organizer — Cursor Hackathon (Oct — Nov 2025):** Co-organized an international-scale hackathon at Bahir Dar University. Coordinated logistics, participant mentorship, jury evaluation criteria, university leadership relations, and industry partnerships.

- Web Development Mentor — Eshet Academy (*Mar — May 2025*): Mentored high school students during a 3-month intensive coding bootcamp. Guided teams in building real-world applications including school management portals and student club registration systems.

#### **Honors & Recognitions**

- Best Top 3 Internship Project of 2025 — *Bahir Dar University*
- 3rd Place Winner — *BiT AI Hackathon (Computing Association - BiT)*
- Top 10 Finalist — *Innovation for Peace 2025 (Bahir Dar University)*
- PLP Software Development Scholar — *Power Learn Project*