

Meron Abera Shibiru

Addis Ababa, Ethiopia · meronabera2121@gmail.com · +251977418627 · [Github](#) · [LinkedIn](#)

- **Summary:** Dedicated to advancing healthcare through innovative algorithmic solutions, machine learning modeling, and interdisciplinary computer science research for developing efficient software.

EDUCATION

Addis Ababa University Science and Technology - BSc Software Engineering, Class of 2024

- **Courses:** Data Structures and Algorithms, Probability and Statistics, Data Communication and Networking, Artificial Intelligence, Compiler Design, Discrete Mathematics, Computer Architecture, and Distributed Systems, Computer Security, Operating Systems, and Object-Oriented Programming.
-

TECHNICAL SKILLS

- **Hard skills:** Proficient in research methodologies such as literature review and gap analysis, technical expertise in Python, JavaScript (React, Node.js, Express), advanced big data analytics, and statistics.
 - **Soft skills:** problem-solving, team player, multimodal communicator, self-start, critical thinking, leadership, creativity, and fast learning.
-

WORK EXPERIENCE

TamaCares (remote) Alexandria, Virginia(remote) | Oct 2023 - April 2025

- Built an OCR model and pipeline that is able to extract Medicine details from any given prescription format with a doctor's handwriting with **84%** accuracy and generate a useful summary of medicines.
- Developed a web application that helps individuals, particularly visitors and immigrants in the US, convert their prescriptions to an approved version by the US healthcare system.

Venuine – Freelance Event Management Developer Remote | Dec 2023 – May 2024

- Built and launched a complete venue reservation and event management system, enabling real-time availability tracking, event hosting, and role-based access, improved booking reliability and user experience.
- Integrated Stripe to automate payment processing and added a self-serve settings dashboard, reducing manual admin tasks and improving transaction efficiency.
- Researched leading reservation systems to design double-booking-proof systems and ensure long term scalability.

Micro Sun and Solution P.L.C- Backend developer Intern, Addis Ababa | July 2023 – Oct 2023

- Designed and implemented an efficient algorithm for tender matching, reducing operational review time from 3 business days to 1 business day and enhancing decision-making accuracy.
- Integrated their manual payment system with "*Chapa*" to automate their transactions and reduce transaction processing times by $\frac{2}{3}$.
- Optimized API endpoints using advanced data structures, reducing system communication overhead and enhancing interoperability between their distributed components.

Hexlabs- Mobile Application Developer Intern, Addis Ababa | May 2023 – Sep 2023

- Developed a mobile app for healthcare solutions that aimed to cut down on the average two-day waiting time for doctor appointments.
- Used advanced state management techniques to achieve smooth app performance by **30%**.
- Integrated Firebase to enable communication and data synchronization in real-time to enable smooth interactions between medical professionals and patients.

Huawei Technologies PLC.- Software delivery engineer, Addis Ababa | May 2024 – Sep 2024

- Interned on the Software Maintenance Team supporting Huawei's work with Ethio Telecom's core systems.
 - Implemented customized software solutions for telecom clients, optimizing system integrations and enabling deployment of Huawei's cloud and networking products.
-

PROJECTS

HomeHeart

- Developed HomeHeart, a networking platform that uses a Machine Learning matching algorithm and the PERN stack to link immigrants and therapists globally to provide virtual mental health care.

Smart Air Purification System

- Designed a water-based purifier reducing PM2.5 by 30% in low-resource settings.
- Developed an app for real-time air quality tracking and control using IoT.

Facial Recognition Attendance System

- Built a face recognition attendance system using a CNN model (93% accuracy), with a Django backend and a React.js interface for smooth, secure user interaction.
 - Focused on inclusive design by testing across a wide range of facial profiles to reduce bias and improve fairness in detection.
-

COMMUNITY & VOLUNTEER EXPERIENCE

Volunteer Developer – Develop for Good

Remote - Oct 2024 – Feb 2025

- Collaborated with cross-functional teams to enhance the 3D Girls, Inc. website by adding new features and improving existing functionality.

Teaching Assistant – Addis Ababa Science and Technology University

Addis Ababa | 2023

- Supported coursework in core software engineering subjects and facilitated lab sessions.
- Guided students in understanding algorithmic logic and debugging practices.

Mentor – AASTU Google Developer Clubs (GDC)

Addis Ababa | 2022 – 2024

- Supported and mentored peers on web development and coding interview prep.
- Led hands-on workshops and project-based coding sessions.

Member – RTC (Rewriting the Code), Baddies in Tech

July 2024 - Present

- Participated in mentorship, skill-building, and peer support programs for women in tech.
- Engaged in community-led workshops and hackathons on career readiness and inclusive design.

Government-Endorsed Academic Excellence Awardee

November 2024

- Received honors from Addis Ababa City Government Bureau of Women, Children & Social Affairs for outstanding academic performance.