

NATHANAEL CHERAMLAK WOLDE

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PROFESSIONAL SUMMARY

Curious and passionate Software Engineer focused on problem solving, AI/ML, and building reliable backend systems. Strong team player who enjoys learning, collaborating, and delivering impactful solutions.

PROFESSIONAL EXPERIENCE

AI Software Engineer

iCog Labs (AI research and software development company)

11/2025 – Present
Addis Ababa

- Developed and optimized components of the **OpenPsi** cognitive architecture, enhancing **motivation and emotion models** for autonomous decision-making within the **OpenCog Hyperon AGI**.
- Deployed a production-grade **emotion detection service** using **Vision Transformer (ViT)** and **Transfer Learning**, achieving a **92.5% F1-Score** and **sub-200ms inference latency**.

AI Software Engineer Intern

iCog Labs (AI research and software development company)

06/2025 – 10/2025
Addis Ababa

- Optimized** NLP and Computer Vision models by integrating advanced **Transformer** and **CNN** architectures, resulting in a **10% increase in predictive accuracy** for classification tasks.
- Architected** and deployed the model API using **Docker** for reliable service portability, implementing **LRU Caching** to ensure efficient, low-latency performance.

Backend Engineer Intern

Kuraz Tech

04/2025 – 08/2025
Remote

- Designed and optimized database schemas, **improving query performance by 30%**.
- Implemented **authentication** and **caching** mechanisms, reducing server response time by **20%**.

EDUCATION

BSc. Computer Science

Addis Ababa University (10th Best University in Africa)

11/2023 – Present
Addis Ababa

Relevant Coursework: DSA, OOP, OS, Intro to SE, Computer Architecture, DB Design, Web Dev

Competitive Programming

Africa to Silicon Valley (A2SV)

12/2024 – Present

- A2SV has helped over **80+** students secure top tech internships and jobs at companies like Google, Palantir, and Bloomberg through its year-long program.
- Solved **1,000+ DSA problems** (LeetCode, Codeforces), achieving a **Top 20 National Ranking** through rigorous practice.

Software Engineering (Backend Specialization) | ALX

Relevant Coursework: Python, Web Development, APIs & Backend Dev, Web Servers & Security

01/2023 – 2024

PROJECTS

True Vote

Decentralized Voting Platform

- Built a decentralized voting platform** using Solidity, Hardhat, Ethers.js, and Next.js, enabling transparent, tamper-resistant elections with secure one-wallet-one-vote enforcement.
- Implemented full election lifecycle management** (creation, scheduling, real-time insights, extension, closure, deletion) with robust smart-contract access control and seamless MetaMask integration.

Enawga

Real-Time Chat Application

- Engineered** real-time chat functionality using **Web Sockets (Node.js)** for low-latency, bidirectional communication.
- Implemented** secure user authentication via **Google OAuth** and managed data storage with **MongoDB**.

TECHNICAL SKILLS

Programming Languages

Python, JavaScript, C++, HTML, CSS, SQL

Developer Tools

Git, Github, Docker, Postman, Trello, Vercel

Libraries and Frameworks

Express.js, React, Next.js, Flask, Redux, MongoDB

AWARDS AND ACHIEVEMENTS

- Gold Medalist** | National Inter-University Championship | Addis Ababa University & Chess Federation
- 10+ Certifications on AI & Data Science** | Coursera with Partnering Universities
- Hackathon Finalists** | Google Developer Student Clubs (GDSC)