Surafel Kindu Mulaw

Phone: +251986214242 · **Email:** surafel.mulaw@gmail.com · **Website:** surafeljava.github.io
Addis Ababa, Ethiopia

AI SPECIALIST AND FULL-STACK DEVELOPER

Full-stack developer, ML engineer & n8n specialist with over 5 years of experience in building scalable applications AI, SaaS & Enterprise solutions. Passionate about leveraging new AI technologies, including large language models (LLMs) and fine-tuning models for domain-specific applications. Demonstrated my expertise in researching, designing, and deploying AI-driven systems, such as a hate speech detection model for Amharic and advanced data analysis tools for healthcare and finance. Skilled in Python, TensorFlow, and PyTorch, with a strong focus on using machine learning to optimize processes and enhance decision-making.
Complementing this is extensive experience in full-stack development, specializing in frameworks and tools such as Django, React, Node.js, and Flutter, enabling the creation of secure, scalable, and intuitive web and mobile applications.

TECH SKILLS

- Python
- TypeScript
- JavaScript
- Java
- React Native
- React.js
- Next.js
- Web3
- Django
- MongoDB
- Postgresql
- Clickhouse
- N8N
- Tensorflow
- Numpy
- Pytorch
- LangChain
- Node.js
- Pandas
- Java

PROFESSIONAL EXPERIENCE

TestSavant.AI (testsavant.ai)   May, 2024 - Present

Senior Full-Stack Engineer *(Django, Next.js, N8N, TensorFlow, Clickhouse, Web3)*

- At TestSavant, I develop and fine-tune AI models to secure systems against prompt injection, regex attacks, toxic prompts, and other AI security issues.
- I also lead the development of a web app using Django and Next.js, streamlining backend workflows and enhancing efficiency by 60%.
- Working on custom n8n community package, python sdk and typescript package for AI Guard (TestSavant Guard).

Tefer.io (www.tefer.io)   Dec, 2023 - May, 2024

Senior Software Engineer *(Django, React.js, AWS)*

- Led the expansion of StableDuel to the UK market by developing an interactive website with live streaming and account management.
- Designed and deployed promotional contest features, driving user engagement by 25%.
- Streamlined development processes, reducing deployment time by 20% through automation and best practices.

Project Links: Stableduel

Auction Ethiopia (auction-ethiopia.com)   Nov, 2022 - May, 2024

Mobile Application Developer *(React Native - Expo)*

- Designed and developed a cross-platform mobile application for online bidding using React Native and Expo.
- Enhanced app performance, resulting in a 15% increase in user retention.
- Successfully launched on both Android and iOS platforms, driving over 50,000 downloads.

Project Links: Android & IOS

Lomi Funds PLC (http://lomifunds.org/)   **Jun, 2022 - Nov, 2022**

<u>**Full Stack Developer**</u> *(Node.js & React Native)*

- Developed and maintained a financial services platform using Node.js and React Native, enabling seamless cross-platform functionality.
- Integrated RESTful APIs for authentication and data exchange, reducing response times by 20%.
- Enhanced system reliability and security, supporting millions of secure transactions annually.

Project Links: Lomi Funds

Africrowds   **Sep, 2021 - Jun, 2022**

<u>**Senior Web Developer and UI/UX Designer**</u> *(React.js, Material UI & Svelte)*

- Developed and designed Africrowds, a platform that aims to double the fundraising by African startups from $5 billion in 2021 to $10 billion by 2023 by digitizing the funding process.
- Implemented modern UI/UX principles to enhance user experience, boosting user engagement metrics by 30%.
- Collaborated with stakeholders to deliver on ambitious project deadlines without compromising quality.

EQUB Financial Technologies (www.equb.app)   **Nov, 2020 - Dec, 2021**

<u>**Frontend Developer**</u> *(Flutter)*

- Built and deployed the EQUB app, a savings and credit platform, on Android and iOS.
- Designed intuitive user interfaces using Flutter and Material UI, leading to a 35% increase in user satisfaction scores.
- Ensured cross-platform compatibility, reducing reported bugs by 50%.

Project Links: Android & IOS

EDUCATION

Addis Ababa University | Addis Ababa, Ethiopia
Bachelor's Degree in Software Engineering

RESEARCH INTERNSHIPS

AI & Machine Learning Research Internship *(Python)*   **Feb 2020 - Mar 2020**
Advisor: Varun Dutt, M.S., Ph.D.
Associate Professor, IIT Mandi, India.
IIT Mandi, India (www.iitmandi.ac.in)

- A one-month research internship focused on understanding machine learning and deep learning.
- Developed and trained machine learning models using Python, TensorFlow, and PyTorch to analyze type-2 diabetes data and generate insights and recommendations.

Hate Speech Detection and Classification ML Model for Amharic *(Python)*   **Aug 2021 - Nov 2022**
Advisor: Elefelious Getachew Belay, Ph.D.
Assistant Professor, Addis Ababa University, Ethiopia.
Addis Ababa Institute of Technology, Ethiopia
Project link

- I developed a Hate Speech Detection and Classification ML Model for Amharic, employing Transfer Learning techniques for enhanced accuracy.
- Established a user-friendly data annotation platform using a Telegram bot and website, engaging campus students in crowdsource labeling, identifying hateful phrases, and rating aggression levels.
- Expanded project impact by hosting a feature-rich website, integrating a Twitter API to map recent Amharic hateful posts geographically, alongside a function enabling users to analyze paragraphs or essays for hateful content.