

Surafel Fikru

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github.com/surafelfikru | aisdk.rs

SUMMARY

Software engineer who builds AI agents and the tooling underneath them. Three years shipping LLM systems in production: multi-modal chat agents, retrieval pipelines, and knowledge graph platforms, in Python, Rust, and Go. Maintainer of [aisdk](https://aisdk.rs), an open source Rust AI SDK with 248 stars and 73+ supported providers.

EXPERIENCE

SingularityNET | Software Engineer

International, based in Switzerland, Feb 2023 to present

Agent platform (OmegaClaw and MettaClaw, 91 stars)

- Added multi-modal input to a Telegram AI agent, so it reads images, PDFs, and voice notes and can send images back.
- Built a plugin system for swapping communication channels and memory, and brought reasoning models to every agent on the platform.

Retrieval and search

- Built a RAG system in Go, FastAPI, and LangChain, shipped as a Mattermost plugin that answers questions from a team's own chat history and documents.

MeTTa-KG, a Deep Funding backed knowledge graph platform

- Full-stack engineer across a Rust backend and a SolidJS frontend, working on the frontend architecture, graph operations, and the exploration UI.
- Owned deployment with Docker Compose, DigitalOcean, and CI/CD.

MORK, an in-memory graph database in Rust

- Added streaming query status, crash recovery through a write-ahead log, and transactional concurrency.
- Wrote the Python client, the Rust SDK, and a SolidJS admin dashboard.

Backend and blockchain

- Built a real time chat backend in Python with encrypted messaging, WebSockets, Kafka, and Celery.
- Built Django REST backends for large scale audio data collection and for transaction management.
- Wrote Cardano smart contracts in Plutus and an ERC20 contract in Solidity.

iCog Labs | Software Developer Intern

Addis Ababa, Oct 2022 to Feb 2023

- Built a GraphQL microservice, a Telegram bot library in Haskell, and a proof of work blockchain in Rust.

OPEN SOURCE

aisdk | core maintainer, 2025 to present

Rust, 248 stars, aisdk.rs

Provider agnostic AI SDK for Rust, inspired by the Vercel AI SDK, with five releases shipped to crates.io.

- Built the tool calling system, the async streaming layer, and hooks for multi step agent runs.
- Grew provider support to 73+, including embedding and reasoning models.
- Wrote the documentation site and a benchmark suite comparing it with other Rust AI libraries.

Mamba | author, 2026

Rust

Remote build tool for AI coding agents. It runs cargo builds on a machine you pick and streams the output back to your terminal.

Upstream contributions

- [64bit/async-openai](#), a Rust OpenAI client: fixed streamed tool calls.
- [zifeo/lade](#), a secret loader for shells and agents: added per user secrets.

EDUCATION

Addis Ababa University, BA in Business Administration and Information Systems, 2019 to 2023

Certifications: Supervised Machine Learning (DeepLearning.AI), Mathematics for Machine Learning: Linear Algebra (Imperial College London)

SKILLS

Languages: Python, Rust, Go, TypeScript, Haskell, Solidity

AI: LLM agents, tool calling, RAG, LangChain, embeddings, streaming, prompt engineering, multi-modal input

Backend: FastAPI, Django, PostgreSQL, Kafka, Celery, WebSockets, SSE, GraphQL

Frontend and tooling: SolidJS, Svelte, Next.js, Tailwind, Docker, CI/CD