

KARTHIK IDIKUDA

AI Engineer · Full-Stack Developer

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SUMMARY

AI Engineer and Full-Stack Developer with 95+ shipped projects across AI, web, and mobile. 2 published patents. 3 pull requests merged into production at Grafana (65K+ stars) and Vercel AI SDK. Open-source contributor to Storybook, PyTorch Lightning, Streamlit, React Router, Microsoft Autogen, and Drizzle ORM. 1,100+ GitHub contributions in the past year. Skilled in LLMs, computer vision, agent architectures, React, Next.js, FastAPI, and Python. Pursuing B.Tech in Artificial Intelligence at Marwadi University.

EXPERIENCE

AI Engineer & Frontend Developer

Mar 2026 — July 2026

infinall.ai · Hyderabad · Internship · 5 months

- Designed and deployed LLM-powered agent architectures and prompt pipelines using Anthropic API and OpenAI, reducing hallucination rates through structured output validation.
- Owned AI infrastructure end-to-end: model selection, fine-tuning, API design, and production monitoring — ensuring reliability across all deployed services.
- Shipped AI features on 2-week sprint cycles collaborating directly with founders, maintaining 99%+ uptime across all production endpoints.

Full Stack Engineer

Jan 2026 — Feb 2026

infinall.ai · Hyderabad · Internship

- Built React and Next.js front-ends with FastAPI and Flask back-ends powering core AI product flows in production.
- Reduced API response latency by optimizing backend architecture; maintained 99%+ uptime across critical endpoints.
- Shipped features end-to-end from design to deployment within 2-week sprint cycles.

Computer Vision Engineer Intern

Jun 2025 — Dec 2025

Karoza Technologies LLP · Rajkot · Hybrid · 7 months

- Developed real-time object detection and tracking pipelines for automation use cases using OpenCV and TensorFlow / PyTorch.
- Optimized models for accuracy and latency in production workflows.

User Interface Designer

Oct 2024 — Jan 2025

pax-z · Hyderabad · Remote · 4 months

- Designed and prototyped user interfaces in Figma — wireframes, mockups, and interactive prototypes.
- Conducted usability testing and maintained consistent design systems.

Industrial Training

Jan 2024 — Jun 2024

NSIC Technical Services Centre (Govt. of India) · Secunderabad · On-site · 6 months

- Completed hands-on industrial training addressing real-world computer-science challenges.
- Worked with senior engineers on software development workflows and IT systems.

OPEN SOURCE CONTRIBUTIONS

- Grafana · PR #121535 — Fixed MySQL query builder generating invalid ORDER BY for alerting queries. Merged in v13.0.0.
- Grafana · PR #121772 — Fixed PostgreSQL & MSSQL SQL comment stripping breaking queries with -- or /* inside string literals. Merged and shipped in production.
- Vercel AI SDK · PR #13961 — Fixed Anthropic provider sending duplicate cache-control in multi-modal messages. Merged into main.
- Open PRs: Storybook #34424, PyTorch Lightning #21631, Streamlit #14583, React Router #14942, Microsoft Autogen #7497, Drizzle ORM.

PATENTS

- Meeting Room Management System — Published, India Patent Office.
- Swimming Pool Safety & Monitoring System — Published Sep 2025, India Patent Office.

SELECTED PROJECTS

ResearchGPT — Python · Multi-Agent · AI · NLP

Autonomous multi-agent research system with 9 parallel AI agents that search, cross-validate, and synthesize sources into structured reports.

TerraView OS — TypeScript · MapLibre · React · OSS

Open-source Google Maps alternative built on MapLibre GL JS with real-time weather overlays, street-level views, and zero-cost self-hosting.

SyncWatch — TypeScript · WebSocket · React

Real-time synchronized watch-together platform for streaming videos with friends across any distance.

CompletePDF — TypeScript · React · PDF · SaaS

Browser-based PDF toolkit — merge, split, compress, convert, and edit documents with zero uploads required.

Drought Early Warning — Python · LSTM · AI · Geospatial

NDDI-LSTM drought-forecasting model with early-warning indicators, satellite data ingestion, and region-level risk scoring.

NEURON-X Omega — Python · Anthropic · FastAPI · AI

Self-sovereign permanent AI memory system with biologically-inspired architecture, custom SOMA-DB engine, and Ebbinghaus decay curves.

NeuroXAI — TensorFlow · React · XAI

Explainable AI for Alzheimer's detection from MRI scans — Grad-CAM visualizations show which brain regions triggered the diagnosis.

TECH STACK

Languages: Python · TypeScript · JavaScript · Kotlin · MongoDB · Firebase

Frontend: React · Next.js · Vite · Tailwind CSS · Flutter

Backend: FastAPI · Flask · Node.js · Firebase · Supabase · MongoDB

AI / ML / CV: TensorFlow · PyTorch · OpenCV · Streamlit · Pandas · LLMs · Anthropic API

Cloud / DevOps: AWS · Docker · Vercel · Git · GitHub

Design: Figma · Relume · Framer

EDUCATION

B.Tech, Artificial Intelligence (AI & Machine Learning)

Jul 2024 — Sep 2027

Marwadi University, Gujarat · CGPA: 6.2

Relevant coursework: Data Structures & Algorithms, Machine Learning, Deep Learning, Computer Vision, Natural Language Processing, Database Systems, Operating Systems, Computer Networks, Software Engineering.

Diploma, Computer Science Engineering — Grade A

2021 — 2024

Sree Dattaha Group of Institutions ·

Coursework: Programming in C/C++, Data Structures, DBMS, Operating Systems, Computer Networks, Web Development, Software Engineering.

ACHIEVEMENTS & HACKATHONS

- **Hacksagon 2026 Finalist** — ABV-IIIITM Gwalior (IEEE MP Section) · National Level · 2,100+ teams · Built ResearchGPT, an autonomous 9-agent research system, over 36 hours.
- **YUVAAN 2026 Finalist** — AVEVA x IIT Hyderabad National AI/ML Hackathon · Built PRISM, an AI dashboard for pharmaceutical batch manufacturing using LightGBM and SHAP on 60 real batches.
- **Google Solution Challenge 2026** — Built AXIOM, a real-time AI fairness firewall using causal discovery (DirectLiNGAM + Gemini) with cryptographically signed audit certificates, deployed on Google Cloud Run.

CERTIFICATIONS (24 Total)

Issuing Bodies: Columbia University · AWS · Google · IBM · Cisco · Anthropic · DeepLearning.AI · Infosys · Springboard · Skillsoft · Unstop · Udemy · Simplilearn

Highlights:

- Machine Learning I — Columbia University
- AWS Cloud Foundations — AWS
- Generative AI — Google
- Prompt Engineering — DeepLearning.AI
- Claude Code in Action — Anthropic
- Software Engineer — Infosys
- AI: Human-Computer Interaction — Infosys / Skillsoft
- Python for Data Science — IBM
- Python Essentials 1, Cybersecurity, Operating Systems, Network Computer Technician — Cisco