Sairamnath (Sai) Krishnan

✉ ksairamnath@gmail.com | www.linkedin.com/in/sairamnathk | sairam960.github.io/portfolio-SDE

SUMMARY

Software engineer with a passion for turning complexity into clarity and a proven track record of influencing product roadmaps. I've worked closely with ground teams to take products from 0→1 and thrive in fast-paced, high-impact environments, ready to bring that energy to your team.

EDUCATION

Master of Science in **Information Systems | GPA: 3.59/4** — **College Park, MD**
University of Maryland, Robert H Smith School of Business — **Dec 2024**

Bachelor of Technology in **Information Technology**
Anna University, Sri Venkateswara College of Engineering — **May 2021**

SKILLS

Programming Languages: Python, Java, JavaScript, C++, PL/SQL, R.
Front End: React, React.js, Next.js, Tailwind, Angular, HTML/CSS, Spring Boot.
Back End & APIs: Node.js (Express), REST, WebSockets, GraphQL, FastAPI, Fastify, Postman.
Data & Cloud: SQL, Snowflake, Hadoop, Kafka, PostgreSQL, MongoDB (NoSQL), AWS (S3, ECS, Lambda, Sagemaker).
GenAI / LLM Ops: OpenAI API, OpenAI Embeddings, LiteLLM router, LangChain, RAG, prompt design, LLM Fine-tuning.
DevOps / CI-CD: Docker, GitHub Actions, PowerBI, Junit, Jenkins, Grafana.

EXPERIENCE

YourPassion1st — Oak Park, IL, USA
Software Engineer — Feb 2025 - Present
- Led end-to-end infrastructure migration from a legacy private server to AWS, modernizing the static website using **Next.js**, improving onboarding flow and reducing average page load time by **60%**.

Myma.AI — Nashville, TN, USA
Founding Software Engineer — Jan 2024 - Dec 2024
- Engineered **OpenAI powered chat agents** to **automate** customer complaint and room service process, improving complaint turnaround-time by 30x and boosting customer satisfaction by **30%**.
- Reduced hallucination rates by **80%+** through **RAG**, rule-based filters, and QA pipelines, eliminating overconfidence in production.
- Co-hosted internal workshops on AI agent integration and recorded demo walkthrough for onboarding new agents.

University of Maryland — College Park, MD, USA
Consultant, Software Developer — Jan 2024 - Dec 2024
- Automated inventory counting with **React.js** web application, saved store team **7+** hours/week.
- Built an analytics tool to visualize $1M+ in annual inventory data, cutting procurement processing time by **30%**.
- Designed ETL pipelines using python to calculate operational costs from Grubhub sales data, reducing costs by **47%** during summer.

LTIMindtree — Chennai, India
Software Engineer – Quality Assurance Team — Jun 2021 - Jul 2023
- Designed an OpenTelemetry based observability tool for cloud-native microservices, simulating 2000 concurrent users to identify performance bottlenecks in our system and prepare for our largest traffic events.
- Increased test coverage by **120%** to reliably automate testing efforts using Tricentis Neoload cloud service.
- Partnered with tribe leaders to shape onboarding using walkthroughs, workshops and technical documentation enabling new joiners to scale up quickly, reducing time to first bug conversion by **40%**.

PROJECTS

AI Admissions Assistant (GitHub)
- Built a RAG chatbot with LangChain, OpenAI, and FAISS to guide students through master's admissions, combining intelligent retrieval and conversational memory for a highly relevant, user-friendly experience.
- Integrated LangChain's **ConversationalRetrievalChain** and memory buffers to support multi-turn conversations, ensuring continuity, and deeper personalization for users exploring admission pathways.

Real-Time Attention Span Tracking in Online Education (IEEE || GitHub)
- Developed an end-to-end attention span detection system using CNNs and OpenCV with real-time webcam inference and GUI feedback, simulating AI-driven human attention monitoring via PyQt GUI (**Published in IEEE at MIT URTC 2020**).
- Trained a Convolutional Neural Network on labeled facial behavior data, optimizing for focused vs. distracted state classification, showcasing ability to translate behavioral cues into data signals.

Crime Data Analysis (GitHub)
- Analyzed crime data with Python and Pandas to find geographic crime trends and built interactive dashboards and geospatial visualizations that identified high-risk patrol zones, enabling law enforcement to optimize resource allocation.