# Sairamnath (Sai) Krishnan

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#### **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  $0 \rightarrow 1$  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 University of Maryland, Robert H Smith School of Business College Park, MD 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, Tailwind, HTML/CSS.

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, Grafana.

## **EXPERIENCE**

YourPassion1st Software Engineer Oak Park, IL, USA

Feb 2025 - Present

• Led end-to-end infrastructure migration from a legacy private server to AWS, modernizing the static website using **Next.js and React.js**, improving onboarding flow and reducing average page load time by **60%**.

Myma.AI

Nashville, TN, USA

Jan 2024 - Dec 2024

Founding Software Engineer

- 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

Jan 2024 - Dec 2024

Consultant, Software Developer

- Automated inventory counting with **React.** is 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.