Sairamnath (Sai) Krishnan

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SKILLS

Programming Languages: Python, Java, TypeScript/JavaScript, C++, PL/SQL, R.
Front End: React Native, React.js, Tailwind, HTML/CSS.
Back End & APIs: Java, Node.js (Express), REST, WebSockets, FastAPI, Fastify.
Data & Cloud: SQL, Snowflake, Hadoop, Kafka, PostgreSQL, MongoDB (NoSQL), AWS (S3, ECS, Lambda, Sagemaker).
GenAI / LLM Ops: OpenAI API, OpenAI Embeddings, LiteLLM router, RAG, prompt design.
DevOps / CI-CD: Docker, GitHub Actions, dbt, PowerBI, Junit, 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, leveraging S3 for scalable storage and ECS for containerized service deployment.
- Modernized static website using Next.js and React.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%**.
- Engineered multiple MCP servers and hooked in relevant API's for dynamic context based chat responses and reducing hallucinations.

Freelancing – Bakery Store   College Park, MD, USA
Software Developer   Jan 2024 - Dec 2024
- Automated inventory counting with a React 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 to calculate operational costs from Grubhub sales data, reducing operational costs by **47%** during summer.

LTIMindtree   Chennai, India
Software Engineer   Jun 2021 - Jul 2023
- Architected an OpenTelemetry-based observability and diagnostics platform for cloud-native microservices, enabling real-time distributed tracing and anomaly detection, reducing MTTR by **25%**.

PROJECTS

AI Admissions Assistant
- 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.

E-commerce Platform Analytics using Pyspark
- Built a distributed data pipeline in PySpark and HDFS to ingest, clean, and analyze e-commerce data from multiple sources, reducing latency by 40%.
- Designed a collaborative filtering recommendation system with 82% precision and 0.85 RMSE, increasing average cart size by 15%.

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.

EDUCATION

Master of Science, Information Systems   Aug 2023 - Dec 2024
University of Maryland, Robert H Smith School of Business
- Coursework: Data Processing and Analysis in Python, Managing Digital Business Market, Project Management, Digital Transformation in Business, Harnessing AI for Business, Causal Inference and A/B Testing, Data - Models and Decision using R.

Bachelor of Technology, Information Technology   Jul 2017 - Jun 2021
Anna University
- Coursework: Programming and Data Structures, Operating systems, Computer Organization and Architecture, Paradigms of Algorithm Design, Software Engineering Methodologies, Database Management Systems, Computer Networks.
- Finalist, Smart India Hackathon 2020 – Placed 2nd out of 100+ teams in a national-level innovation challenge.