

SUGAVANESH MURUGESAN

SWE | AI Engineer | AWS Certified

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SKILLS

- **Cloud & Devops:** AWS, Azure, Docker, Kubernetes, Terraform, Pulumi
- **Frameworks & Paradigms:** Spring Boot, ASP.NET, Ruby on Rails, Express, **Reactive Programming** (Project Reactor, Webflux)
- **Programming Languages:** Java, C#, Go, Python, JavaScript, SQL
- RAG, AI Foundry and agentic AI

PROFESSIONAL EXPERIENCE

AWIGN

Gurgaon, India

AI Specialist

From Nov-2025

- Designed and deployed sophisticated Retrieval-Augmented Generation (RAG) architectures using **Azure AI Foundry**, integrating **GPT-5.2** and **Claude 4.5 Opus** to handle complex industry-specific queries.
- Developed high-accuracy document intelligence systems by implementing **Mistral OCR** and top open-weight models, streamlining data extraction.

PRESIDIO

Chennai, India

Associate Engineer

June 2024-Oct 2025

- Worked on AWS to set up and architect better infrastructure for microservice & data intensive applications.
- Developed AI agents to automate migration tasks via fine-tuning & embeddings.
- Developed Python automation to enhance observability for AWS MGN migrations and cutover monitoring.
- Built tools in .NET, React, and Python to improve internal workflows and deployment automation.

FOURKITES

Chennai, India

Software Developer Intern

Jul 2023-Mar 2024

- Built a new export microservice in Spring Boot that reduced generation time from 15 minutes (.xlsx) to near-instant (.csv) downloads. This significantly improved user experience by reducing delays and separating concerns from the legacy system.
- Integrated with Apache Airflow ETL pipelines, querying Snowflake instead of 3 separate Postgres instances.
- Also contributed to backend APIs and Kubernetes workload migration from AWS to Azure.

PROJECTS

GATHER-SPACE [github.com/GatherSpace/backend] - Spring boot, React & MySQL

From Jan 2025

- Built a virtual workspace platform inspired by Gather.town with real-time user presence, proximity-based interaction, and customizable room layouts. Leveraged Spring Boot, React, WebSockets, and MySQL for scalable real-time backend.
- Implemented user profiles, spatial navigation logic, and customizable room layouts to simulate collaborative environments.

TMUX CRAFT [github.com/sugan0tech/tmuxcraft]	Ongoing
<ul style="list-style-type: none"> Developed a terminal session management tool in Go, inspired by Tmuxifier, to streamline and automate Tmux session workflows. Engineered a CLI-based configuration system using Go's standard library, enhancing developer productivity and session reproducibility. 	
LIFEFLOW [github.com/sugan0tech/capstone]	Aug 2024-Oct 2024
<ul style="list-style-type: none"> An intelligent software assistant for blood banking workflows. Well orchestrated modular monolith application written in ASP.net & react. Built exclusively with EntityFramework & MS SQL server 	
AI-ASSIST RANKING SYSTEM	Jan 2023-Mar 2023
<ul style="list-style-type: none"> Designed and implemented a ranking engine powered by LLMs with Retrieval-Augmented Generation (RAG). Used vector embeddings and similarity search for information retrieval. Integrated Python (LangChain, FAISS) with a Flask API to serve ranked outputs. Led a team of 5 to develop an application designed to handle multiple events for university student groups. Handled backend using Spring Boot; co-developed frontend layers for web and mobile platforms. 	

EDUCATION

SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY	Coimbatore, India
<i>B.E. in Computer Science</i>	<i>CGPA 8.5</i>