

# PAUL ALEX SAMUEL JOHN

AI Engineer | B.Tech in CSE (AI & ML)

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## CAREER OBJECTIVE

AI Engineer with a strong foundation in Generative AI, cloud-native ML solutions, and full-stack development. Passionate about building intelligent systems that solve real-world problems using LLMs, Azure AI services, and autonomous agents. Seeking to contribute to innovative projects at the intersection of AI, cloud, and user-focused product development, while continuously advancing skills in cutting-edge technologies.

## WORK EXPERIENCE

### **Sereno, Mumbai — AI Engineer (Full-Time)** (January 2025 – December 2025)

- Built and deployed AI-driven solutions for enterprise workflows with a focus on agentic AI systems.
- Designed and integrated RAG-based multi-agent pipelines into client products, cutting manual query handling by 40%.
- Optimized Azure AI Search + SQL integration, enabling faster query resolution and improved analytics.
- Mentored interns on LLM-based system design and best practices in deploying cloud-scale AI.

### **NxtGen Cloud Services — AI Engineer Intern** (July 2024 – December 2024)

- Developed and deployed AI models for cloud-native applications, improving efficiency by 30%.
- Designed API-driven ML pipelines using FastAPI, reducing latency by 40%.
- Automated model monitoring and versioning in production.
- Worked with Docker, Kubernetes, SageMaker, Azure, and Vertex AI for end-to-end ML lifecycle.
- Built document AI pipelines using Azure Document Intelligence and OpenAI embeddings; integrated with AzureCognitive Search.

## PROJECTS

**Multi-Agent Text-to-SQL System** (Loyalty Program) – Engineered a 6-agent framework converting NL queries to SQL; integrated with Azure SQL, Azure AI Search, Cosmos DB.

**Azure Document Intelligence OCR + Embedding Pipeline** – Built GenAI pipeline to extract text from OCR PDFs, implemented embeddings, and indexed in Azure Cognitive Search.

**AI Agentic System with Semantic Kernel** (Chinook DB Use Case) – Integrated Hugging Face LLM with SemanticKernel for querying relational tables.

**ASR to ASR** – Converted Kannada audio to Hindi audio by breaking into 3 parts using ASR, LLM and STT by using open-source models from Huggingface with better Prompting for Translation issues.

**Autonomous RAG System with Memory & Agents** – Combined LangChain Memory, GPT-4, ChromaDB with agent-based architecture, achieving 90% context retention.

## SKILLS

Languages: Python, Java, SQL, C

Web & App Dev: React.js, Node.js

Frameworks: TensorFlow, PyTorch, Hugging Face, Keras, Scikit-Learn, Langgraph, MCP

Cloud Platforms: AWS, Azure, GCP

Deployment: FastAPI, Flask, Docker, Kubernetes, CI/CD

Data & Embeddings: FAISS, ChromaDB, LangChain, Pinecone

Vision & NLP: OpenCV, YOLO, R-CNN, GPT-4, BERT

Tools: Git, Jupyter, Streamlit, Google Colab

Soft Skills: Problem-solving, Teamwork, Analytical Thinking

## EDUCATION

B.Tech in CSE (AI & ML) – Avanthi St. Theresa College of Engineering & Technology (2020 – 2024) | GPA: 70%

Intermediate – TP Junior College (2018–2020) | GPA: 70%

10th – Seventh Day Adventist School (2018) | GPA: 97%

## CERTIFICATIONS

- AWS Certified Machine Learning
- Microsoft Azure AI Fundamentals
- Google Cloud AI Engineer
- Hugging Face Agent Tools
- Robo Coupler Certification

## CONTRIBUTIONS & BLOGS

- Contributed to open-source GenAI projects.
- Wrote blogs on GenAI & ML on GitHub and Medium.
- Participated in AI research competitions and hackathons.