

# FATHIMA SHAMILA MEERASA SALEEM

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## PROFILE

AI Engineer and Certified Data Analyst with experience in building intelligent, data-driven solutions using large language models (LLMs), generative AI and data science. Dedicated to leveraging AI technologies to develop innovative products and deliver measurable business value.

## TECHNICAL SKILLS

**AI & ML Frameworks:** Llama-Index, Gradio, scikit-learn, Hugging Face, Docling |  
**Programming & Scripting:** Python, SQL, C, JavaScript, HTML/CSS | **Data Analysis & Visualization:** Google Colab, Jupyter Notebook, Tableau | **Databases & Tools:** SQLite, MySQL, PostgreSQL, MS Visual Studio, GitHub

## EXPERIENCE

AMPCOME

JUL 2025 — PRESENT

### Backend AI Engineer

Worked on an asynchronous task processing system in Python integrated with PostgreSQL, OpenAI, and external APIs including Google, Reddit, and SerpAPI.

Diagnosed pipeline issues involving retry logic, rate limiting, and concurrent processing. Gained hands-on exposure to OAuth2 authentication, AI-powered workflows built on CrewAI, and real-time monitoring via Logfire in a live production environment.

EXTERN

OCT 2025 — DEC 2025

### Advanced AI-Powered Document Insights and Data Extraction Externship:

Built a multi document RAG chatbot using LlamaIndex, Docling, and FAISS that classifies, chunks, and indexes heterogeneous PDFs - detecting mixed document types per page via zero shot LLM prompting and enabling source aware retrieval with page level citations.

Benchmarked Gemini and Mistral 7B on identical RAG pipelines, deploying Mistral with 4 bit quantization for local inference, identifying Gemini as highest quality and quantized Mistral as best quality to resource tradeoff.

Engineered hallucination fallbacks via custom prompt templates and delivered a Gradio chat interface with document structure analysis and chat history export.

## CERTIFICATIONS

Google Advanced Data Analytics

## EDUCATION

B.Tech — INFORMATION TECHNOLOGY, St. Joseph's College of Engineering.