Arthika V S

AI Engineer

AI Developer with expertise in **Data Science, Generative AI,** and **Agentic AI**, specializing in **LLM fine-tuning, multi-agent systems** (including MCP). Demonstrated hands-on experience in building intelligent solutions by integrating **Large Language Models (LLMs)** into real-world applications. Proficient in API integration, workflow automation, and optimization, leveraging emerging tech stacks to drive innovation and efficiency.

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WORK EXPERIENCE

AI Developer
ConceptVines

12/2024 - Present   *Chennai, Tamil Nadu*

Achievements/Tasks

- Developed AI workflows using Crew AI and integrated AWS Bedrock.
- Created GraphRAG systems with Neo4j and used sentence transformers for retrieval.
- Built and deployed AI apps using Flask, FastAPI, Streamlit, and Gradio.
- Used Nginx, Docker, and VMs for secure model deployment.
- Built conversational AI using avatars and TTS with Elai.io and D-ID.
- Worked on proposal evaluation, fraud detection (GAT, GAN), and synthetic data generation.

Frontend Developer & Digital Marketer
Skanda Marketing

05/2023 - 11/2024   *Coimbatore, Tamil Nadu*

Achievements/Tasks

- Designed responsive websites using HTML, CSS, Bootstrap, and JavaScript.
- Improved UX/UI and website SEO for increased user engagement.
- Managed lead generation and social media strategies to grow the business.

EDUCATION

B.Tech in Information Technology
KGiSL Institute of Technology, Tamil Nadu, India

2019 - 2023   *8.4*

Courses & Projects

- **Programming with JavaScript** – Meta (Coursera)
- **Programming in Python** – Meta (Coursera)
- **C Programming** – GUVI
- **Version Control, Front-End Development** – Meta (Coursera)
- **Online Course Reservation System:** Android app for real-time course bookings.
- **Data Dissemination via VANET:** Simulation-based research on data transmission in vehicular networks.

SKILLS

Programming Languages: Python, JavaScript, C, Java

LLMs & AI Tools: Hugging Face, vLLM, Ollama, DeepEvals, LangChain, LangGraph, GraphRAG, OpenAI, Sentence Transformers

Web & API Development: Flask, FastAPI, Streamlit, Gradio, HTML, CSS, JavaScript, Bootstrap

Databases & Embeddings: Neo4j (Cypher), SQL, ChromaDB, OpenAI Embeddings

AI Agents & Video Avatars: Crew AI, Elai.io, D-ID, TTS

Deployment & DevOps: Nginx, Docker, Vercel (v0.dev), Virtual Machines, AWS, Azure

Tools & Libraries: TensorFlow, PyTorch, Scikit-learn, Pandas, NumPy, Matplotlib, Postman, Serper API, Tavily

Web Scraping: BeautifulSoup, Selenium, Serper DevTool

Other: MCP, OpenManus, OpenWebUI

PROFESSIONAL WORK HISTORY

GraphRAG Knowledge System – Intel
- Built a Graph-based RAG system integrating Neo4j, vector databases, and OpenAI embeddings to enable contextual knowledge retrieval across structured and unstructured data sources.
- **Role:** AI Developer
- **Technology Used:** Neo4j, OpenAI Embeddings, Sentence Transformers, Python, FlaskAPI, Docker, PostgreSQL, LangChain, LangGraph, ChromaDB

Fraud Detection Using GAT and GAN – Intel
- Implemented a hybrid GAT-GAN model to detect fraudulent transactions by learning graph-structured behavior patterns and generating synthetic anomalies for model training.
- **Role:** Machine Learning Engineer
- **Technology Used:** PyTorch, DGL, GAN, GAT, Python, Cypher (CQL), Neo4j

Fall Risk Prediction Using DQN – Intel
- Designed a DQN-based agent to classify fall risk levels in elderly patients using synthetic health data, trained in a custom RL environment for optimal clinical decision simulation.
- **Role:** Reinforcement Learning Engineer
- **Technology Used:** Python, PyTorch, DQN, NumPy, Pandas, Scikit-learn, Matplotlib

Diagnosis Code Validation & Auto-JIRA Agent – IQVIA
- Created an NLP-based system to detect invalid diagnosis codes and auto-fill missing values. Automated JIRA ticket creation for anomalies to streamline healthcare data workflows.
- **Role:** AI Automation Engineer
- **Technology Used:** Python, spaCy, Regex, FastAPI, Jira API, Pandas, NumPy