# **ATHARSH K**



https://www.linkedin.com/in/atharsh-k-569701256/



https://github.com/AtharshKrishnamoorthy

atharshkrishnamoorthy@gmail.com



https://www.kaggle.com/atharshkrish

### **EDUCATION**

### **KPR Institute of Engineering and Technology**

• Bachelor of Technology - Artificial Intelligence and Data Science : GPA: 8.1\*/10 (Till 5th Semester)

Coimbatore,India

2022 - 2026

Programming Languages: Python, R, SQL, Java, C

### **Machine Learning & Al**

- Supervised & Unsupervised Learning
- Deep Learning: CNNs, RNNs, LSTMs, GRUs, Energy-based models
- MLOps: ETL, DVC, Containerization, CI/CD
- Natural Language Processing (NLP): Text Preprocessing, Seq2Seq Models, Transformers (BERT, GPT)
- Generative AI (GenAI): Quantizing & Fine-tuning LLMs, RAG Systems, Agentic AI

#### **Tools & Frameworks**

- Core Libraries: Pandas, NumPy, Scikit-Learn, Visualization Libraries
- Deep Learning & NLP: TensorFlow, Keras, PyTorch, Hugging Face Transformers
- LLM & AI Ecosystem: LangChain, Crew AI, Unsloth AI, Phi Data, Langgraph, Opik
- Databases: MySQL, MongoDB, Neo4j
- Development & DevOps: Git, Docker, FastAPI, Postman, MLFlow, Airflow
- Big Data & Cloud: PySpark, Kafka, AWS Bedrock, SageMaker

#### PROFESSIONAL EXPERIENCE

### Maestro Technology Services Pvt Ltd

**Backend Intern** 

Coimbatore,India Jan 2024 - Feb 2024

- Specialized in MySQL: Developed and managed databases using MySQL.
- API Development: Engineered and deployed 20+ RESTful APIs using FastAPI
- Postman: Utilized Postman for API testing and debugging.
- Database Integration: Connected APIs to databases using SQLAIchemy ORM
- Projects Worked on: Developing APIs and implemented ML model deployment pipeline, Earth mover Rental Management system
- Technologies: FastAPI,SQLAlchemy,MySQL,Docker,Pytest

# Yaane Technologies LLC

### **Gen Al Intern**

Coimbatore, India Jan 2025 - Feb 2025

- Legal Agent System: Engineered multi-agent legal workflow with Crew AI for criminal case analysis, implemented knowledge retrieval from IPC sections and case law, evaluated the agents task workflow using agentic metrics like TUE, MCR, CSS and SPI, deployed on Render platform.
- SQL RAG Chatbot: Architected RAG system for natural language database queries with multi-modal input support (audio, image) achieving about 96% accuracy, deployed as an interactive Telegram bot with efficient FAISS vector search.
- Technologies: SQLAlchemy, MySQL, LangChain, FAISS, Groq API, Telegram, speech\_recognition, Docker, Render, Opik, Crew Al, FastAPI, Raaga Al, Streamlit

### **PROJECTS**

### Dermacare

- Description: Collaborated with colleagues to build a full-fledged skin classification system web app. Achieved an accuracy score of 82 % in the testing process of classifying images, where the model is fine tuned on 10 major skin disease classes of 10,000 dermatological Images.
- **Key Features:** Integrated chatbot support and medical report analysis.
- Tech Stack: Pretrained CNN models VGG16 and ResNet, transfer learning techniques, Gemini API, LangChain framework.

# ConfidenStrategy - Al Driven Strategical Analysis platform

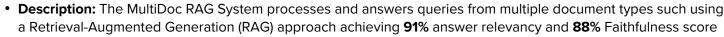
- Description: ConfidentStrategy is an AI platform using LLMs to analyze business data and generate strategic visualizations with over 85 % accuracy.
- Key Features: Company analysis, market projections, strategy generation, interactive chat, TTS summaries, resource visualization, revenue forecasting, risk assessment, implementation planning.
- Tech Stack: Streamlit, Alpha Vantage/Groq/Finnhub/Deepgram APIs, Plotly, pandas, FAISS, HuggingFace Embeddings, cryptography (used AES-256 Hashing for encrypting the company details).

# DOCU GENIE: Al-Powered Document Summarizer



- Description: DOCU GENIE is an advanced Al-powered document summarization tool that leverages Google's Gemini model to intelligently summarize PDFs and notes (both handwritten and typed).
- Key Features: PDF and Notes Summarization, Text-to-Speech functionality, Interactive Chat for further clarification, Feedback Loop for summary refinement, Integrated with Google Gemini Al and Deepgram APIs. Does the processing of 100 page document in less than 50 seconds.
- Tech Stack: Streamlit, PyPDF2, Reportlab, Pillow, Gemini API, Deepgram API.

# MultiDoc RAG System (7)



### Key Features:

- Multi-Document Support (Text, PDF, CSV, Web URLs, PPTs, Word Files, Images)
- Vector Embedding Storage (FAISS + Hugging Face Embeddings)
- Utilizing Llama 3.3-70B-versatile provided by Groq Inference.
- Interactive UI for document management and querying
- Tech Stack Streamlit, LangChain Ecosystem, FAISS, Groq Inference Engine, Llama 3.1-70B Model, Sentence-Transformers.

# Molecular Solubility Predction

- Description: Developed a web application that predicts molecular solubility (LogS) values using machine learning models trained on chemical descriptors.
- Key Features: Interactive SMILES input, custom parameter adjustments, and visual analysis of solubility predictions with classification.

### **WORKSHOPS AND HACKATHONS:**

### 1. National Workshop on Machine Learning: Techniques and Trends (NIT Trichy)

Gained hands-on experience with ML algorithms, deep learning, feature engineering, and advanced techniques like speech recognition and reinforcement learning.

### 2. Hackathons:

### Smart India Hackathon (SIH)

- Project: Indian Version of Nagish App
- Developed an app to communicate in native languages using Langchain, Quantized Llama 3 70B, LibreTranslate API,

# Tata Technologies Innovent 24 Hackathon

- Project: OBD Diagnostic Tool
- Car condition analysis and service station locator using Langchain, Mixtral 8\*7B, Maps API.

### **Google Gemini API Developer Competition**

- Project: DOCU GENIE Al-Powered Document Summarizer
- Summarizes PDFs with text-to-speech and interactive chat using Google Gemini and Deepgram APIs.

# **CERTIFICATIONS**

# MLOps Course - Udemy

Learnt end-to-end MLOps expertise in building, automating, and deploying scalable machine learning pipelines using Git, Docker, MLflow, DVC, Apache Airflow, CI/CD, and AWS SageMaker for production environments.

### NPTEL Data Analytics with Python:

Achieved elite scoring (Above 65%), mastering data manipulation, statistical analysis, and visualization using Python.