AP VIJAY ARUNACHALAM

Chennai, Tamil Nadu

📞 +91- 9080774819   ✉ blockloader78@gmail.com   in vijay (Arunachalam)   ⊙ vijayarun00100   </> vijayarun   ▣ vijayarun

EDUCATION

Vellore Institute of Technology   **Sept. 2022 – Present**
*Btech in Computer Science with spl in Cyber Physical Systems- **CGPA - 8.26***   *Chennai, India*

Velammal Vidhyalaya   **April. 2020 – June. 2022**
*CBSE - Higher Secondary (Class 12th) - **Percentage - 85.0%***   *Chennai, India*

SBOA   **April. 2006 – March. 2020**
*CBSE - Secondary (Class 10th) - **Percentage - 82.0%***   *Chennai, India*

COURSEWORK / SKILLS

- Data Structures & Algorithms
- Operating Systems
- Design & Analysis of Algorithms
- OOPS Concept
- Problem Solving
- LLM
- Database Management System (DBMS)
- ML & DL

PROJECTS

Automated Email Assistant Using LLM and MIME ↗ | LLM (Mistral 7B), Python   **April. 2024**
- Built an AI-powered Gmail assistant using Mistral 7B and Python to streamline email management with NLP
- Enabled smart features like email summarization, date/location extraction, and context-aware replies and reminders

RAG-Enhanced Legal Assistant for Commercial Law ↗ | LLM, RAG, LangChain, Chroma   **Sep. 2024**
- Engineered a legal assistant for commercial courts using OCR, LangChain, and RAG with Ollama embeddings and Chroma for semantic document retrieval and legal research automation
- Built a secure Streamlit interface enabling multilingual queries, legal summarization, predictive analytics, and AI-assisted drafting of context-relevant legal arguments

ML-Powered Platform for Single Mother ↗ | ML, MERN   **Mar. 2024**
- Built a full-stack app using MERN to support single mothers with resources and community access
- Integrated features like a multilingual chatbot, forum, job board, and podcast hub; achieved 85% accuracy in text classification

EXPERIENCE

Work in center of Cyber Physical System ↗   **April. 2024 – May. 2024**
Research Intern : BERT-Enhanced Multimodel Clustering Framework   *Chennai, Ind*
- Developed an OCR-driven image clustering pipeline leveraging BERT embeddings and multiple clustering techniques (K-Means, DBSCAN, Agglomerative, GMM) for content-based grouping.
- Applied cosine similarity and other machine learning algorithms to perform accurate clustering on embedded vectors

TECHNICAL SKILLS

Languages: Python, C++, Java, ReactJS, NextJS, Express JS, MongoDB, SQL, JavaScript
Developer Tools: Basics in MATLAB, Cisco Packet Tracer, LTspice, ModelSim, Keil Vision, ptolemy
Technologies/Frameworks: AWS, ML, DL, LLM, RAG, Keras, Tensorflow, Pytorch, ROS, OpenCV

CERTIFICATIONS

- **Machine Learning**: Stanford Online — Learned core ML algorithms and applications   2025
- **Microsoft Azure AI 900**: Microsoft — Gained fundamentals of AI and Azure AI services   2024

ACHIEVEMENTS

- **Syntax Showdown** — Secured **1st rank** (solved CP questions under time limit)   2024
- **Devshouse'24** — Secured **2nd rank** in National Level Hackathon (Built an End-To-End Web App   2024
  powered with ML)
- **Gen-AI** — Secured **1st rank** in our problem statement (Built an automated Email Assistant Application) 2024