## Yugeshkaran P

# **Objective**

As an AI enthusiast, focusing on producing inventions that address real-time problems to contribute for the growth and success of your esteemed organization.

#### **Education**

### Bachelor of Technology | Artificial Intelligence & Data Science

2021 - 2025

Dhanalakshmi Srinivasan University, Trichy

C.G.P.A - 9.21

#### Computer Science | Class XII

Aug 2021

SaiVidhyalaya (C.B.S.E), Trichy

Percentage - 92%

Class X May 2019

SaiVidhyalaya (C.B.S.E), Trichy

Percentage - 70%

### **Projects**

MySQL RAG System | GenAI- Developed a retrieval augmented generator system using LLMs (Large Language Models) to make analysis on MySQL database. Need of this application is to enhance the productivity of industries and organizations who are dealing with huge volume of data. <a href="GithubLink">GithubLink</a>
 Technology Stack Used - LLM llama-3.1-8b-instant | Flask | Langchain | Groq api | MySQL Server | React js

• Pinecone Q&A document retrieval | GenAI- Created a Natural Language Processing LLM chatbot using Pinecone vector database and Huggingface. It can easily summarize the documents for research analysis use cases and also can be used for content extraction. GithubLink

**Technology Stack Used** - LLM mixtral-8x7b-32768 | embedding model - sentence-transformers/all-MiniLM-L6-v2 | Flask | pinecone VectorDB

• Pneumonia Disease Prediction | Deep Learning- Developed a DL model for pneumonia disease prediction using Resnet18 - CNN (convolutional neural network) to check whether a patient is affected by pneumonia cancer or not by using the chest X-ray image. <u>GithubLink</u>

Technology Stack Used - Docker | CNN model - Resnet18 | torchvision | torch

 Health Insurance Prediction & House Price Prediction | Machine Learning- Developed a prediction model for finding the price for health insurance and housing based on historical data by using randomforest regression algorithm. <u>GitubLink</u>

Technology Stack Used - pandas | numpy | matplotlib | scikit-learn | seaborn

• MongoDB RAG System | GenAI- Developed a retrieval augmented generator system for mongodb database using LLMs (Large Language Models). It can analyze the complete schema structure of mongodb collections to provide key insights and metrics based on user query. GithubLink

Technology Stack Used - MongoDB Atlas | Flask | Langchain | Langsmith | React is | LLM llama-3.1-8b-instant | pymongo

Content Manipulator chatbot | GenAI- Created a chatbot using large language models to manipulate content for social media application. It helps authors to create post content for social media. <u>GithubLink</u>
 Technology Stack Used - Flask backend framework | Langchain | Langsmith | React js | LLM mixtral-8x7b-32768

- Blog Browser E-Learning Platform | Web Application Developed a app for building communities to share tech blogs and posts. It helps students and developers to exchange their tech skills and knowledge among each others.
  Technology Stack Used Nodejs | Express.js | React.js | Tailwind CSS | soket.io | MongoDB | Deployment Platform Vercel | AWS S3 bucket
  GithubLink
- Attendance Software | Web Application Developed a attendance software to address the issue of handling large volume of students records by implement search-mark functionality. It helps faculties to reduce the effort and time Technology Stack Used php | MySQL server | XAMPP | HTML | CSS | Java Script GithubLink

### Skills Set

Technical Skills: Hands on experience in

- Software Tools Visual Studio code editor | Git & GitHub version control | Docker containerization and shipping code | Dialogue Flow create NLP chatbot .
- Data Science Packages / Frameworks Pytorch | Langchain | Langsmith | Pandas | Matplotlib | Scikit-Learn |
  Numpy
- Backend Packages / Frameworks Flask | Node.js | Socket.io | Express.js | mongoose | dynamoose | mysql-connector-python
- Frontend Packages / Frameworks React Vite | Tailwind CSS | axios
- Databases- MySQL | MongoDB | DynamoDB | Pinecone
- Deployment Services Vercel | Render | Amazon Web Sevices
- AWS Cloud Services S3 bucket | Amplify | IAM | Elastic Container Service | Elastic Container Registry | lambda.

Soft Skills: Effective Communication, Critical Thinking, Leadership and Problem Solving.

#### **Certifications**

**Courses -** Python for Data Science, Data Analysis with Python, SQL and Relational Databases 101, Data Visualization using python.

**Workshops -** Prompt Engineering. | Fundamentals of Automation using Embedded System | Barclays LifeSkills Programme

**Conference -** Paper presented in International Conference on Innovations and Applications of Artificial Intelligence in Engineering and Agriculture -ICIAAIEA 24 on the title of Attendance Management and Analysis system using LLM.

### **Internships**

Web Development | Online at Quantum Sharq Innovative Solutions - Paid

**Data Science Internship | Online** at CompWallah IT Industry.