## Madhumitha K

Erode, Tamil Nadu | Email : mithamadhu8785@gmail.com | +91 84385 77395 Links: LinkedIn | Github | Leetcode

## **Professional Summary**

Versatile and detail-oriented Full Stack Developer and Machine Learning Engineer with hands-on experience in building scalable, responsive web applications and deploying intelligent ML models. Adept at integrating frontend and backend technologies with data-driven solutions.

#### **Technical Skills**

- Languages: Python, JavaScript, TypeScript, SQL, Java
- Frontend: React.js, Next.js, HTML5, CSS3, Tailwind CSS, Redux
- Backend: Node.js, Express, Django, Flask, REST APIs, MEAN-Stack
- ML/Al: TensorFlow, PyTorch, Scikit-learn, OpenCV, Pandas, NumPy
- Databases: MongoDB, PostgreSQL, MySQL, Firebase
- Tools & DevOps: Git, Docker, AWS, Azure, Linux, CI/CD, Jupyter Notebooks
- Others: GraphQL, FastAPI,Rest AP

## **Professional Experience**

#### Full Stack Developer Intern | Kalv - UK

Dec 2024 - Present

- Built responsive, mobile-friendly UI layouts using HTML5, CSS3, Tailwind CSS, Flexbox, and Grid. •
- Developed interactive React.js components and integrated them with backend REST APIs

#### Machine Learning Engineer Intern | Cube Al Solutions

May 2024 – July 2024

- Built and deployed ML-powered systems, including hospital doctor availability detection and YOLOv5-based security monitoring.
- Processed healthcare datasets with Pandas and deployed models as scalable REST APIs using Flask and Docker

# **Projects**

#### **Image Classifier**

- Designed and trained a CNN for custom image classification tasks.
- Achieved 92% accuracy and deployed via FastAPI for public API access

#### Voice-based Music Recommendation System

- Built an intelligent music recommendation system operating via voice interaction and NLP-based mood detection (similar to Alexa).
- when the similar person voice is recognized, based on the person mood it recommend the song from youtube and similar sites

#### **Text-to-Image Generator**

- Built an intelligent music recommendation system operating via voice interaction and NLP-based mood detection (similar to Alexa).
- when the similar person voice is recognized, based on the person mood it recommend the song from youtube and similar sites

#### Building bingo game using cursor ai

- A responsive, accessible UI using semantic HTML, modern CSS, and JavaScript—lightweight and framework-free
- Developed in Cursor with GPT-5, focusing on scalable, maintainable code and planned features like multicard support and sound effects.

#### Automatic time table

 Smart India Hackathon (SIH) 2025: Designed and implemented an AI/ML-driven platform to analyze realtime data, detect anomalies, and generate alerts for enhanced decision-making. Our project selected in Top 50 out of 300 projects for SIH

Youtube Link: <a href="https://youtu.be/lexotDdNTqY?si=ShCV19snhkY7SB4u">https://youtu.be/lexotDdNTqY?si=ShCV19snhkY7SB4u</a>

### **Education**

Bachelor of Engineering (B.E.) in Computer Science (Artificial Intelligence & Machine Learning)

Dr. Mahalingam College of Engineering and Technology, Pollachi, Tamil Nadu

2023 – 2027

CGPA: 8.3/10 (semester-5)

HSC | Adharsh Vidhayalaya Matric School, Bhavanil Percentage(89%)

SSLC | Adharsh Vidhayalaya Matric School, Bhavanil Percentage(84%)

## Certifications

- Full Stack Web Development Coursera / Udemy
- Python for Data Science and Machine Learning Udemy
- Python for Beginners Eureka.
- Introduction to Machine Learning -Great Learning.
- Cloud DevOps Workshop Skill Nation

### **Achievements**

- 3rd Prize Winner in Website Development (Frontend role) Competition at Dr. Mahalingam College of Engineering and Technology (2025)
- 3rd Prize by built a dynamic, responsive stock market web application using HTML, CSS, Python (backend), and MongoDB within a 2-hour timed challenge.

# **Sports**

- 1st Prize Winner (2 times) in Anna University Chess Zoom 10 Event
- Secured 1st place in inter-college technical competitions organized by Anna University, showcasing strong problem-solving, web development, and coding skills.