

Pavan Kumar Jayavelu

6380155963 | pavankumarjin02@gmail.com | [LinkedIn](#) | [GitHub](#)

SUMMARY

A dedicated undergraduate student with a strong passion for problem-solving and effective collaboration. Eager to apply academic knowledge in a practical setting and contribute to innovative projects. Committed to continuous learning and ready to add value in a dynamic team environment.

TECHNICAL SKILLS

Programming Languages: Java, Python, SQL, Dart,

Tools: VS Code, MS Office, Fetter

Coursework: Object-Oriented Programming, Data Structures Algorithms, Database Management Systems, Computer Networks, Operating Systems, Software Engineering, Artificial Intelligence, Machine Learning, Natural Language Processing, Digital Image Processing.

SOFT SKILLS

Creativity Skill ,Communication Skills, Problem Solving, Teamwork, Analytical Skills, Critical Thinking, Adaptability, Time Management, Organizational Skills,

PROJECTS

Real-Time Health and GPS Tracker for Climbers

Hardware and Software Project

Jul 2024 – Dec 2024

Python (**Scikit-learn**), Raspberry Pi, Arduino UNO

- **Purpose:** Enhance safety oversight for climbers in remote areas.
- **Key Features:**
 - **Continuous Monitoring:** Tracks heart rate, body temperature, and GPS location.
 - **Low-Power Transmission:** Ensures long battery life for devices in remote settings.
 - **Mobile Alerts:** Notifies emergency contacts of abnormal vitals or off-route movements, improving situational awareness and rescue readiness.
 - **Support Vector Machine (SVM) :** Separating temperature and blood pressure to analysis
This system aims to provide critical safety information and timely alerts to enhance climber safety.

Music Genre Classification and Language Detection System

Machine Learning / Audio Processing Project

May 2025 – Jul 2025

Python, TensorFlow, Keras, Librosa, OpenAI Whisper, Scikit-learn

- **Purpose:** Designed and implemented a machine learning–based audio analysis system to automatically classify music genres and detect the language of song lyrics from audio files.
- **Key Features:**
 - **Deep Learning Model:** Developed a Convolutional Neural Network (CNN) using TensorFlow and Keras for multi-class music genre classification based on Mel Spectrogram features.
 - **Audio & Language Processing:** Utilized Librosa for feature extraction and OpenAI Whisper for speech-to-text transcription and lyric language detection, with model performance evaluation using accuracy and loss metrics.

EXPERIENCE

Computer Society of India –ACM VIT-AP Student Chapter

Event Management Team Member

Amaravati, India

June 2024 – May 2025

- Joined as a Associate member

EDUCATION

VIT-AP University

B.Tech in Computer Science and Engineering (Artificial Intelligence and Machine Learning) | CGPA: 8.12/10.00 Sep 2023 – Jul 2027

Amaravati, India

CERTIFICATIONS

Introduction to Data Science(Infosys)
Fundamentals of Deep Learning(NVIDIA)
Hedera Certified Foundation HCF