RAJAPANDI B

linkedIn: http://www.linkedin.com/in/rajapandi86
github: Rajapandi03 (github.com)

Email: vhinitech@gmail.com
Mobile: +91 8072737825

EDUCATION

Sethu Institute of Technology — Tamil Nadu, India
Bachelor of Technology - computer science and business systems; GPA: 7.27 — *July 2022 - June 2026*
Courses: *Computer Vision, Artificial Intelligence, machine learning, deep learning, Edge Computing, Data Structures & Algorithms*

SKILLS SUMMARY

- **Languages**: C, C+ +, Python (for AI/ML, data analysis, and computer vision)
- **Frameworks**: OpenCV, TensorFlow, Keras, Scikit-learn, NLTK,
- **Tools**: GIT, MySQL, SQLite
- **Platforms**: Web, Windows, Arduino, Raspberry,
- **Soft Skills**: Leadership, Event Management, Problem Solving, Critical Thinking, Time Management

EXPERIENCE

- **NoviTech R&D Private Limited** — Remote
  (Intern - Artificial Intelligence) 13th June 2024 – 13th july 202024
  - Developed object detection models and processed images to enhance visual data analysis.
  - Improved model accuracy through effective data preprocessing and augmentation.
  - Collaborated with the team to implement real-time machine learning algorithms for object detection.

- **Cognifyz Technology.** — Remote
  (Intern - Machine Learning) July 2024 - August 2024 (1 month)
  - Assisted in developing machine learning models for predictive analytics and data classification.
  - Engaged in feature engineering and model evaluation to optimize performance.
  - Collaborated with team members on data-driven projects, enhancing decision-making processes.

PROJECTS

- **Advanced Edge AI Navigation and Assistance System for Blind**

  Developed a computer vision-based navigation system to empower visually impaired users with real-time object detection, person recognition, and environmental awareness. The system reads and speaks written notices, enabling safe and independent navigation.

  Tech: Python, OpenCV, TensorFlow, Raspberry Pi

- **Real-Time Gesture Recognition System**

  Designed and implemented a real-time gesture recognition system using deep learning models to identify hand gestures, enhancing interaction for assistive technology applications. The system features a lightweight architecture for efficient processing on edge devices**.**

  Tech: Python, TensorFlow, OpenCV, Keras

- **Automated Book Reader for the Visually Impaired**

  Created a system that utilizes computer vision to detect text in books and read it aloud, providing an accessible solution for visually impaired users. The project leverages OCR and text-to-speech technologies for seamless interaction

  Tech: Python, OpenCV, Tesseract OCR, gTTS

- **Automated Vision Systems for Tracking and Mapping Urban Wildlife Activity**

  System designed to detect and monitor urban wildlife using computer vision techniques, facilitating data collection and analysis of animal behavior and movement patterns.

  Tech: Python, TensorFlow, OpenCV, Raspberry Pi

PUBLICATIONS

- **Advanced Edge AI Navigation and Assistance System for Blind Users**
  Published in *International Journal for Multidisciplinary Research (IJFMR)*, Volume 6, Issue 5 (September-October 2024).

  This paper presents an innovative AI-powered navigation system designed for visually impaired users. It integrates real-time object detection, person recognition, text reading, and traffic signal response, all while operating efficiently on low-power mobile platforms.

HONORS AND AWARDS

- **First Place** – *Winning Paper Presentation*, K.S.R College of Engineering, 2022
- Honours Diploma in Computer Application (HDCA) Completed

VOLUNTEER EXPERIENCE

- **Sethu Institute of Technology, CSBS Department (March 2024)**
  Led the planning and execution of the departmental symposium, coordinating events and managing logistics effectively.

- **Organizer, College Hostel Day**, Sethu Institute of Technology **[October 2023]**
  Successfully coordinated the planning and execution of the college hostel day, managing logistics and organizing activities.
  Engaged students and faculty, fostering a sense of community and collaboration among hostel residents.