A S SENTHIL VELAN

✉ a.s.senthil19@gmail.com   📞 8148833514   in/A S Senthil velan   Senthil-velan19

EDUCATION

B.E. Computer Science Engineering, *Chennai Institute of Technology*   *2023-Present*
CGPA: 8.14

SKILLS

Web Development: - React.js, TailwindCSS, HTML, CSS, JavaScript, Fast API, Express.js , Node.js
App Development: - Android Studio
Programming Languages: - Python, C++, SQL, Mongo DB

PROJECTS

1.**E-Commerce Online Shop,**
May,2024
- Designed and developed an e-commerce website for selling organic vegetables, using HTML, CSS, and JavaScript.
- Implemented user registration and login functionality, enhancing user experience and security.
- Created a dynamic shop page for browsing and purchasing products, along with a cart system for order management.
- Developed a customer care page to provide support and improve customer service.

2.**Indian Currency Identifier for Visually Impaired People**,
September,2024
- Developed a robust model to recognize Indian currency notes using Convolutional Neural Networks (CNN) for accurate banknote identification.
- Optimized the model with TensorFlow Lite quantization for mobile deployment, ensuring real-time recognition on low-power devices.
- Chose this project based on a problem statement from the RBI hackathon, addressing accessibility challenges for visually impaired users.

3.**WhatsApp Chatbot for Physiotherapy,**
Nov,2024
- Developed a WhatsApp chatbot integrating Gemini AI for pain assessment & diagnosis
- Designed JSON-based chatbot flow to recommend exercises and analyze patient reports.
- Streamlined physiotherapy consultation, reducing response time significantly.

AI-Based Traffic Violation Detection System
June 2025
- Developed a YOLOv8-based real-time system to detect helmet violations, seatbelt violations, over-speeding, and illegal parking using live CCTV feeds.
- Deployed on Jetson Nano for low-cost edge implementation suitable for rural and urban areas.
- Designed with a modular architecture for easy integration into smart city infrastructure and traffic management systems.

An Intelligent Web-Based System for Automated Faculty Publication Summarization and Reporting
July 2025
- Built a web portal for faculty to submit their publication details, which are organized year-wise and automatically formatted into Word documents.
- Enabled auto-upload of generated documents into a central summary dashboard, supporting efficient institutional reporting and NAAC ranking preparation.

INTERNSHIP EXPERIENCE

1.**Intern- *IITM Research Park* -**SHHC Private Ltd -**URHAB**
 May 2024 - June 2024

- Learned web development technologies including HTML, CSS, JavaScript, Git, and GitHub.
- Developed e-commerce online shop for selling organic vegetables, integrating user registration, login, product browsing, shopping cart, and customer care features.

2. Intern - *IIT Research Park* - *Aegle pro*
November 2024 - December 2024

- **Developed WhatsApp Flows:** Created and optimized JSON flows for treatment-related questions, enhancing user engagement.
- **Integrated Gemini AI with WhatsApp:** Fully implemented Gemini AI capabilities into WhatsApp, improving response accuracy and efficiency. Enhanced user experience by enabling real-time interaction and automated responses. Streamlined the process of handling patient queries, reducing response time significantly.
- **Chatbot Development:** Built a chatbot for the company's application, successfully integrating Gemini Physiotherapist AI. The chatbot provides exercise sets and reps, analyzes patient reports, offers diagnoses, and recommends consulting a physiotherapist for serious injuries.

ACHIEVEMENTS

- *Presenter @ICSCAN'24, an IEEE Conference*   *December,2024*
- *DISTRICT-Level TABLE-TENNIS*   *September,2019*

CERTIFICATIONS

1.Cisco Networking and Cyber Security   2. Udemy Machine Learning   3. Google Android Development

4.Coursera-Datastructures   5. MSME Python   6.Coursera-Algorithms on graphs.