

Shivam Sandip Chavan

930-943-8835 | shivamchavan0512@gmail.com | LinkedIn | GitHub | VIT Chennai

EDUCATION

Vellore Institute of Technology, Chennai

B.Tech in Computer Science and Engineering | Student Council Member (2025–26)

CGPA: 9.28

Aug 2023 – Present

EXPERIENCE

Full Stack Developer | PenPixel LLP

Jun. 2025 - Sep 2025

- Designed and implemented an **Employee Onboarding System** using **Next.js** and **MongoDB**, streamlining HR workflows and improving efficiency.
- Automated document processing and form filling with **Puppeteer**, reducing manual effort and onboarding time.
- Deployed the application using **Coolify**, ensuring scalable, secure, and efficient production workflows.
- Utilized **Hetzner Cloud** for document storage, providing reliable and cost-effective infrastructure.
- Implemented **Swagger API documentation** to standardize backend services and simplify developer integration.

Product Intern | Ziga Infotech

Mar. 2025 - Jun. 2025

- Engineered and deployed a high-performance **Flutter application** for real-time image processing, leveraging the **YOLOv8 model** to detect and count pipes.
- Implemented real-time image processing, achieving **95% accuracy** in detecting and mapping pipes.
- Collaborated with a team of 3 members to ensure seamless frontend-backend integration and optimize model performance for deployment.

PROJECTS

LLM-Powered Intelligent Document Query System

Jul 2025

- Developed an **AI-powered document query system** using **RAG** and intelligent agents for insurance, legal, HR, and compliance use cases.
- Enabled processing of **15+ file formats** with OCR and secure validation for robust document handling.
- Integrated **Sentence Transformers + FAISS** for semantic search, achieving **92% accuracy**.
- Built a scalable pipeline using **FastAPI, Mistral API, and HuggingFace**, ensuring reliable responses in <10s latency.

FloatChat | AI-Powered Ocean Intelligence Platform

Sep 2025

- Developed an **AI-powered ocean analytics platform** with a **RAG-based chatbot** for natural language querying of oceanographic data.
- Built a scalable full-stack system using **React, TypeScript, Firebase, and Supabase** for real-time data integration.
- Designed backend AI pipeline with **Flask + Mistral API**, achieving fast query responses (<10s).
- Created **interactive dashboards and 3D visualizations** using Recharts and Three.js for enhanced data insights.

PUBLICATIONS

System And Method For Autonomous Navigation Of Vehicle | ID: 202541013968

Feb 2025

- Constructed an **autonomous self-driving car** using computer vision, leveraging **lane detection, YOLO-based object recognition**, and **low-latency processing pipelines** for real-time obstacle avoidance and decision-making, minimizing hardware costs and enhancing safety and traffic flow.

Parkinson Image Synthesis and Classification using Deep Learning | ICEC2NT 2025

Sep 2025

- Developed a **GAN-based deep learning framework** for Parkinson's Disease detection, generating synthetic medical images to address data scarcity and improve classification performance, achieving **98% accuracy** with strong recall and image quality metrics.

TECHNICAL SKILLS

Languages: Java, C, C++, Python, JavaScript, SQL

Frameworks: ReactJS, Next.js, Flutter, Flask, Tailwind

Libraries: TensorFlow, OpenCV, Keras

Databases & Cloud: MySQL, MongoDB, Firebase, Supabase

Developer Tools: GitHub, HTML, REST APIs, Kaggle, HuggingFace, Swagger, Puppeteer, Coolify, Hetzner