

# Piyush Sayaji Torawane

Mumbai, Maharashtra | torawanepiyush@gmail.com | +91 9372746248

Linkedin: piyush-torawane | Github: piyushtorawane

## Education

Vellore Institute Of Technology,

July 2022 – July 2026

B.Tech. in Computer Science with specialization in AI & ML

- CGPA: 8.19/10

## Skills

**Languages:** Python, SQL, Node.js,

**Framework/Tools:** Flask, PyTorch, TensorFlow, Pandas, NumPy, Scikit-learn, Streamlit

**Database System/Data Tools:** MySQL, MongoDB, Power BI, Tableau, Excel

## Projects

**Panoptic Image Segmentation using Deep Learning** | Tech Stack: Python, PyTorch, Deep Learning, Computer Vision

- Developed a panoptic segmentation model integrating semantic and instance segmentation using **Mask R-CNN (Detectron2)**.
- Trained and validated the model on the **COCO dataset**, improving object detection accuracy and segmentation precision through preprocessing and hyperparameter tuning.
- Implemented a real-time inference pipeline and evaluated performance using **mAP, IoU, and PQ metrics**.
- Utilized **Python, Deep Learning, Computer Vision**, and GPU-based training to optimize model performance and reduce training time.

**HealthCare System** | Tech Stack: Node.js, MongoDB, Machine Learning, AWS

- Developed a healthcare management platform enabling secure patient data handling and real-time record access.
- Built REST APIs for appointment scheduling, user authentication, and medical data retrieval, improving workflow efficiency.
- Integrated machine learning models (Random Forest, XGBoost) to analyze environmental parameters and support data-driven insights.
- Deployed components on AWS for scalable processing and high-availability access.

**SEBI Safe Space – Financial Security & Compliance Platform** |

Tech Stack: Flask, Streamlit, Machine Learning, MongoDB, REST APIs

- Engineered a 4-module SEBI compliance platform featuring AI-based fraud detection, deepfake identification, and advisor verification; processed 1,000+ financial records with 85%+ model accuracy.
- Built microservice-driven architecture with Python/Flask APIs and a Streamlit dashboard for real-time monitoring, automated compliance checks, and alert generation.
- Implemented secure data workflows and role-based access to enhance financial transparency and reduce manual validation time.

## Certifications

- Oracle Cloud Infrastructure Generative AI - Oracle
- Oracle AI Vector Search - Oracle

## Achievements

**AwsxZelextra:** Secured AIR-63 , beating 200,000+ participants from over 3,500 institutions.

**IIM Ahmedabad CaseStudy Challenge 2024:** Ranked Top 15 teams globally in a 36-hour innovation case study challenge.

**SEBI FINANCE HACKATHON Finalist**

## Co-curricular

**Club Coordinator,**

Fintech club

- Streamlined pipeline management processes through automation tools, reducing processing time by 35% and ensuring timely updates on 95% of scheduled financial review