AYUSH SRIVASTAVA

BTECH CSE (AI & ML) | VIT CHENNAI

Phone: 7275264022 ayush.srivastava26108@gmail.com

PROFILE INFO

Passionate AI and ML enthusiast with experience in developing deep learning and computer vision solutions. Skilled in optimizing machine learning models for real-time applications with limited computational resources. Interested in research opportunities in computer vision, AI, pattern recognition, and deep learning.

EDUCATION

2023 - 2027
VELLORE INSTITUTE OF TECHNOLOGY (VIT) CHENNAI

- BTech in Computer Science and Engineering (AI & ML)

2009-2022
ST JOSEPH'S COLLEGE, PRAYAGRAJ

- Scored 87% in ICSE Board in Senior Secondary (Class 12).
- Scored 91.6% in ICSE Board in Secondary Education (Class 10).

SKILLS

- Programming: Python, C++,Java OpenCV, TensorFlow, PyTorch
- Deep Learning: CNNs, YOLO, CSRNet, ResNet
- Algorithms: A*, Heuristic Optimization
- Tools: Google Colab, Jupyter Notebook, Git
- Soft Skills: Problem-Solving, Team Leadership, Research & Analysis

PROJECTS AND EXPERIENCE

Machine Learning-Based Real-Time Congestion Detection System

Technologies Used: Python, OpenCV, YOLOv8, CSRNet, TensorFlow/PyTorch, Google Colab

- Developed a hybrid CNN-based congestion detection system.
- Used YOLOv8 for low-density and CSRNet for high-density crowd counting.
- Implemented a real-time image processing pipeline using OpenCV.
- Designed a dynamic model-switching mechanism based on crowd density.
- Optimized execution for efficient processing on limited computational resources.

Indoor Positioning System for Optimal Navigation – VIT Chennai

Technologies Used: Python, OpenCV, YOLOv8, CSRNet, A⋆ Algorithm, Google Colab

- Developed an AI-powered indoor navigation system using real-time CCTV footage.
- Estimated congestion levels using a hybrid CNN model.
- Designed a variable heuristic function considering both distance and congestion levels.
- Implemented an A⋆ algorithm-based optimized routing system for navigation.
- Conducted extensive testing to validate efficiency and scalability.

LANGUAGES

- English (Fluent)
- Hindi (Fluent)
- Japanese (Basics)