

Yash Thakkar

 Yash Thakkar |  yashmthakkar13@gmail.com |  noMathematician1729

EDUCATION

K.J. Somaiya College of Engineering

B.Tech in Information Technology

2024 – 2028

CGPA: 9.79

WORK EXPERIENCE

Computer Vision Intern

H2L Robotics India

June 2026 - Present

- Developing an automated annotation pipeline for agricultural datasets, reducing manual labeling effort and improving dataset preparation efficiency.
- Evaluating and fine-tuning YOLO, RF-DETR, and other state-of-the-art object detection models on real-world agricultural data using industry-standard benchmarks for bounding box as well as polygon annotations.

AI & ML Lead

Fostride

May 2025 – February 2026

- Headed the Image Processing and ML team, coordinating task allocation and development timelines for the AI pipeline of a smart waste-segregation system with accuracy of upto 93% on real world data.
- Worked closely with robotics and systems teams to align computer vision and ML components with ROS-based integration and deployment requirements.

Image Processing & MATLAB Department

Team KJSSE Robocon

Oct 2024 – Jul 2026

- **Department Head** (May 2025 – Jul 2026): Led an 11 member team developing autonomous robotic algorithms using Computer Vision, Artificial Intelligence, ROS, and MATLAB for DD Robocon 2026. Won 1st Prize MathWorks Modelling Award.
- **Junior Engineer** (Oct 2024 – May 2025): Implemented real-time object detection using YOLOv5 and YOLOv8 for autonomous robot navigation and basketball hoop tracking, optimized for deployment within a ROS pipeline.

PROJECTS

R3Bin

 r3bin.fostride.com

- Led the Image Processing and Machine Learning team to design and implement the AI-driven computer vision automation pipeline for R3Bin, a smart waste-segregation dustbin.
- Contributed to the end-to-end ROS pipeline, covering data collection, perception, system integration, and real-time monitoring.
- Built and deployed real-time waste detection pipelines, seamlessly integrated with robotic actuation for automated waste sorting.

DCT Protocol Hack X 2026

 [DCT Protocol - -1x devs](#)

- Built a full-stack on-chain AI agent auth protocol on Base Sepolia using ERC-8004, Biscuit WASM, TLSNotary, and ERC-4337; shipped a 12-phase live demo with SSE streaming, O(1) cascade revocation, and a React console for multi-agent orchestration.
- Designed an ML-driven trust scoring engine for autonomous AI agents using a 3-signal model (scope adherence, task completion, time-decayed quality) to gate on-chain delegation across four tiers, with defenses against sybil attacks, burst farming, and history padding.

Senate Datathon 2026

 [Senate - OmShantyOm](#)

- Built an AI agent for developer recommendation using a RAG-based system that parses developer skills, availability, and internal ratings to match client prompts with suitable engineers.
- Designed and implemented the RAG pipeline and scoring system, incorporating GitHub commit activity, WakaTime usage data, and Copilot-based code review scores to rank candidates.

SKILLS

Languages C++, Python, C, HTML, CSS, JavaScript, Competitive Programming

ML/DL PyTorch, OpenCV, Scikit-learn, Image Processing, LangChain, LLMs, RAG, LangGraph

Tools Git, Linux, AWS, GCP, Postgress, Express, React, Node, MongoDB, ROS

ACHIEVEMENTS

Hack X 2026 Winner • Mathworks Modelling Award 2026 Winner