

Ajitesh Tamrakar

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ABOUT

Computer Science (AI & ML) student with experience in AI automation and full-stack systems; enjoys building practical tools and exploring tech-driven creativity.

EXPERIENCE

Software Development Engineering Intern – AI Automation

Aug 2025 – Oct 2025

Vaartalabs Technology

- Contributed to AI-based SaaS prototypes and automation workflows across multiple internal projects.
- Built proof-of-concept systems combining computer vision, AI pipelines, and backend services, with human-in-the-loop validation.
- Developed Django-based APIs integrated with AI workflows orchestrated via n8n.
- **Key projects:** Sketch – Automated Estimation, Image Asset Generation Platform

PROJECTS

Sketch – Automated Estimation from Glass Design Images

(Built at Vaartalabs)

- Built a computer vision-based system to extract dimensions from glass design sketches and assist in cost estimation.
- Developed an OpenCV pipeline to detect rectangular components using contour analysis and geometric constraints.
- Implemented a hybrid OCR workflow (EasyOCR + Google OCR) to improve text detection reliability.
- Designed a geometry-aware algorithm to associate dimensions with corresponding shape edges.
- Integrated the pipeline into a Django interface with human-in-the-loop correction and PDF estimate generation.

Image Asset Generation – AI-Powered Marketing Creatives

(Built at Vaartalabs)

- Built an AI-assisted platform for generating personalized marketing creatives with enforced layout structure.
- Designed admin-configurable data collection and AI-based summarization for reusable brand context.
- Pivoted from fully AI-generated layouts to a layout-constrained approach to improve layout correctness and readability.
- Orchestrated image generation workflows using n8n and Django.
- Implemented a grid-based layout system for reliable placement of text and branding elements.

Accountancy Web App (Django) 🌐 📄 — Shop analytics system with dashboards, dealer insights, payments, and bill image gallery.

Object Detection Web App (YOLOv5, Django) 🌐 — Real-time object detection web app with live webcam inference.

TECHNICAL SKILLS

Languages: Python, JavaScript

Frameworks: Django, React

Libraries: OpenCV, MediaPipe, scikit-learn, NumPy, Pandas

Tools: Git, GitHub, n8n, Postman, Linux

EDUCATION

Bachelor of Technology in Computer Science (AI & ML)

Expected July 2026

The Lakshmi Narain College of Technology and Science, Bhopal

INTERESTS

Anime, Manhwa, Story-driven and Co-op games.