

SUMMARY

I'm Pratham V. Jain, an AI & Robotics Engineering student from Bangalore Institute of Technology, India, working on Physical AI — developing intelligent systems that connect foundation models with real-world robotics. I run a student-led self funded robotics lab from my room, where my team and I conduct experiments on embodied AI systems. I also manage the Robotics India Community, a network of 3,000+ members advancing robotics education and collaboration. Recently, my team won the Laundry Hackathon for training SO-101 robotic arms using LeRobot and foundational AI policies, and I was invited to NVIDIA's Physical AI Labs for my contributions to intelligent robotic systems.

PROFESSIONAL EXPERIENCE

Community manager — Robotics India CommunityJan 2024 - Present

- Managing a community of 3,000+ robotics and AI enthusiasts across India.
- Organize workshops, mentorship sessions, and technical discussions on ROS 2, Gazebo, and AI-driven robotics.
- Facilitate collaborations between students, research groups, and early-stage robotics startups.

NVIDIA Jetson BYOC: Physical AI Lab (Sim → Edge)

Participant — NVIDIA Graphics, Bengaluru | Sept 2025

- Explored the Jetson AGX Thor platform and its applications in humanoid robotics
- Built digital twins using Isaac Sim/Lab with integrated sensor stacks
- Optimized LLMs with TensorRT-LLM + RAG for edge deployment
- Developed video search and summarization using Vision-Language Models (VLMs)
- Deployed DeepStream and Isaac ROS containers on Jetson for real-time applications
- Collaborated with NVIDIA engineers on the Sim → Edge Physical AI pipeline

PROJECTS

1. Autonomous Clothes-Folding Robot (Winner – Laundry Hackathon 2025)
- Developed an intelligent robotic system to autonomously fold clothes using SO-101 robot arms.
  - Applied LeRobot and foundation model policies for imitation learning-based manipulation.
  - Integrated vision and control pipelines for real-world task generalization.
2. TurtleBot Memory Navigation with Voice Commands
- Implemented SLAM-based navigation using ROS 2 and Gazebo, with voice command control.
  - Enabled robots to “remember” locations (e.g., “Go to kitchen”) through embedding-based spatial memory.

SKILLS

Python	ISAAC SIM	Robotics foundation models
ROS2	Jetson Platforms	Model fine-tuning

EDUCATION

Bachelor of Robotics and Artificial Intelligence EngineeringSep 2023 - May 2027

Bangalore institute of technology

ADDITIONAL INFORMATION

- Languages:** English, Hindi , Kannada
- Certifications:** getting started with jetson nano Nvidia, Unmanned Aerial Vehicles .
- Awards/Activities:** first place laundry hackathon .