Pritesh Rodge

EDUCATION

Indian Institute of Information Technology, Design and Manufacturing

Jabalpur, M.P

Bachelors of Technology in Computer Science and Engineering

Aug. 2023 - present

Spring Dales Jr College of Arts and Science

Aurangabad, Maharashtra

Higher Secondary Education

Aug. 2021 - May. 2023

EXPERIENCE

Linux Kernel Mentorship (LFX) – Mentor: Shuah Khan, Linux Foundation

Remote

Linux kernel Bug Fixing Summer Mentorship 2025

Jun. 2025 - present

- Contributing to the Linux kernel selftests framework by building, running, and validating test outputs.
- Analyzing test behaviors and logs to understand kernel internals and improve test coverage.
- Learning and practicing kernel patch development: using Git, git format-patch, and git send-email workflows.
- Exploring Linux kernel architecture and subsystems with an interest in debugging, test infrastructure, and sound systems.

TECHNICAL SKILLS

Languages: C/C++, Java, Python, Go, SQL, HTML/CSS

Developer Tools: Git, Docker, Jupyter, Vim, VSCode, Eclipse

Coursework: Data Structures and Algorithms, DBMS, OOPS, Computer Architecture and Organization, Computer

Networks, Operating Systems, Design and Analysis of Algorithms, Internet of Things

Projects

Prithvi 100M Aug 2024 – Present

- Evaluated the Prithvi-EO (100M) geotemporal model's accuracy on the IBM-NASA multi-temporal crop classification dataset using PyTorch for inference and scikit-learn for metrics
- Curated a region-specific geospatial dataset on Indian agricultural patterns using Pandas for tabular preprocessing and OpenCV for satellite image augmentation
- Fine-tuned Prithvi-EO with domain-specific crop data leveraging PyTorch Lightning, NumPy, and custom data loaders for efficient training
- Visualized classification trends and model predictions over time using Matplotlib to extract insights for agricultural planning

Robocon 2025: Wireless Control System for Basketball Robots

Dec 2024 – present

- Designed and implemented the wireless communication system for two semi-autonomous basketball-playing robots
- Evaluated Bluetooth, Wi-Fi, and Zigbee protocols for real-time control; selected Bluetooth for optimal latency and reliability
- Interfaced a PS5 controller with ESP32 to transmit control signals over Bluetooth to an Arduino Mega, using just 6 digital pins to efficiently send signals to secondary microcontrollers with bit manipulation
- Developed a modular communication pipeline for controlling dribbling, shooting, and locomotion

ACHIEVEMENTS

e-Yantra Robotics Competition (eYRC 2024-25)

Aug 2024 – Mar 2025

IIT Bombay

• Ranked in the top 25 out of 700+ teams for the Warehouse Drone theme, developing autonomous drone navigation and package localization with skills in ROS 2, PID Control, Image Processing, Path Planning, and Python/C++.

Volunteering / Skills

Electronics and Robotics Society - IIITDMJ

Mar 2024 – present

- Actively contributed to various robotics and electronics projects, including participation in Robocon 2025 and other related competitions.
- Mentored 200+ school students, delivering robotics workshop on fundamentals and hands-on demonstrations.