

Research Interest

My focus in research involves areas such as 2D/3D computer vision, multi-modal learning, neural rendering and LLM agents.

Education

KJ Somaiya College of Engineering Bachelor of Technology in Electronics Engineering	8.86/10	<i>Aug. 2019 - May 2023</i>
SIES College of Arts Science and Commerce, Sion. High School	90.15%	<i>Jun. 2018 - May 2019</i>

Experience

Undergraduate Researcher , instructed by Prof. Pavan Kumar BN IIIT, Sricity	<i>Jan. 2023 - Jun. 2023</i>
<ul style="list-style-type: none">Researched on “3D object detection using deep learning techniques” using MMDetection3D library	

Publication

A Comprehensive Study on LLM Agent Challenges [\[Link\]](#)

Palash Ingle, Mithun Parab, [Pranay Lendave](#), and Pavan Kumar B N

Accepted at AAAI 2024 Spring Symposium on User-Aligned Assessment of Adaptive AI Systems

A Novel Approach to Weed Detection Using Segmentation and Image Processing Techniques[\[Paper\]](#)

S. Charania, P. Lendave, J. Borwankar and S. Kadge, "A Novel Approach to Weed Detection Using Segmentation and Image Processing Techniques," 2023 World Conference on Communication & Computing (WCONF), RAIPUR, India, 2023, pp. 1-5, doi: 10.1109/WCONF58270.2023.10235132.

Academic projects

Real time weed detection using Image processing and Deep learning	<i>Jun. 2022 - Dec. 2022</i>
<ul style="list-style-type: none">Developed an end-to-end weed detection system for agricultural purposes, utilizing deep learning models for object detection.	
Smart parking system using Deep learning.	<i>Jul. 2022 - Aug. 2022</i>
<ul style="list-style-type: none">Creating an intelligent parking system for complexes to optimize parking availability, implement fair pricing, and automate labour-intensive tasks	
Smart Factory using Deep learning and Computer Vision.	<i>Feb. 2022 - May 2022</i>
<ul style="list-style-type: none">Detecting the condition of the Honey jar using ML. Jars with defects such as no cap, no label, and no honey are discarded.	
GPS tracker and SOS notifier for cyclist. (TY mini project)	<i>Jan. 2022 - Feb. 2022</i>
<ul style="list-style-type: none">An IoT-based project that sends the GPS location of the cyclist in case of an accident. Used API for sending messages to emergency numbers.	

Roles and Responsibilities

Technical Head, Electronics Engineering Students Association, KJSCE	<i>Jul. 2021 - Apr. 2022</i>
<ul style="list-style-type: none">Organized workshops and seminars on cutting-edge technologies, collaborating with industry experts to provide guidance.	
Head of Electronics dept., The Marine Robotics Team (TMRT), KJSCE	<i>Jul. 2021 - May. 2022</i>
<ul style="list-style-type: none">Led a team of four members to build a navigation system for an autonomous underwater vehicle.	

Certifications

<ul style="list-style-type: none">Deep Learning for computer vision, by IIT, Kharagpur, NPTEL	<i>Jan. 2023 - Apr. 2023</i>
<ul style="list-style-type: none">Deep Learning, IIT, Madras, NPTEL	<i>Jan. 2023 - Apr. 2023</i>
<ul style="list-style-type: none">Deep learning specialization, deeplearning.ai	<i>Oct. 2022 - Dec. 2022</i>

Technical skills

- Programming: Python, Pytorch, Java, C, SQL, MATLAB, LaTeX
- Hardware: Arduino, Raspberry Pi, ESP32, Pixhawk

Languages

- English, Hindi, Marathi, and German(basic)