Vaibhav Raheja

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○ github.com/Vaibhavr26

💼 Professional Experience

Research Intern
All India Institute of Medical Sciences (AIIMS) Hospital
2021 – 2023
- Worked on a research project utilizing a robot arm for Robotic Oral Surgery using ROS & Python.
- The project was funded by the Indian Council of Medical Research (ICMR) for $85,000

Intern
Granuler: CIO Consulting
Jan 2020 – May 2020
- Successfully implemented a CRM (Customer Relation Management) system using HubSpot CRM, streamlining workflow and increasing efficiency by 40%.
- Automated CEO's tasks using UiPath for Robotic Process Automation (RPA), resulting in at least 20% saving in resourses.

QA Intern
Intelligence Node
Jul 2018
- Gained experience in web application testing and beta testing

📰 Publications

Multi-Disease Prediction System using Machine Learning
IEEE International Conference on Futuristic Technologies (INCOFT)
Nov 2022
- DOI: 10.1109/INCOFT55651.2022.10094382
- ISBN:978-1-6654-5046-1

Lane Detection using Hough Transform and Histogram
2019
- Article explaining lane detection using computer vision and Hough Transform.

⟨⟩ Projects

Chronic Disease Detection System using Machine Learning
B. Tech Final Year Project
- Developed an expert system achieving over 90% accuracy in predicting chronic diseases such as COVID-19, Pneumonia, Heart Disease, Chronic Kidney Disease, and Diabetes.

Soft Robotics Hand
- Developing a Soft Robotics Hand controlled by stepper motors.

Custom Surveillance Drone
- Built a custom surveillance drone with a modular 3D-printed body and specific components.

Home Automation
- Designed a system to control electronics using mobile phones and voice commands with Google Assistant.

Skin Disease Detection
- Developed a machine learning model using Transfer Learning and CNN, achieving 88% accuracy in detecting various skin diseases.

🎓 Education

Master's of Engineering Autonomy and Robotics
University of Illinois Urbana-Champaign
2023 – present | Champaign, IL, USA

B. Tech in Computer Engineering
Mukesh Patel School of Technology Management & Engineering
2017 – 2023 | Mumbai, India

Diploma in Computer Engineering
Mukesh Patel School of Technology Management & Engineering
2017 – 2023 | Mumbai, India

🖐 Skills

Programming
Python, C++, Robot Operating System(ROS), OpenCV, PyTorch

Software
Autodesk Fusion 360, Linux, Git, UiPath, Microsoft Office

Interpersonal
Technical writing, Leadership, Project Management

🎽 Extra-Curricular

Intelligent Ground Vehicle Competition (IGVC), Detroit MI, USA
Co-Captain
2021 – 2023
- Led team to a 2nd and 3rd place in the Cyber and AutoNav Challenge, demonstrating proficiency in autonomous vehicle navigation

e-Yantra Robotics Competition (eYRC), Mumbai, India
2020 – 2021
- Participated in a competition held by IIT Bombay to make a drone for the delivery of parcels.

Rotaract Club of Bombay Airport, Mumbai, India
Board of Director of Club Service
2019 – 2021
- Managed and initiated Club Service activities, ensuring the effective running of the club.