# Vaibhav Raheja

vaibhavraheja32@gmail.com | +91 9820712740 | Mumbai, India | linkedin.com/vaibhav-raheja-05b85315b/medium.com/@vaibhavraheja32 | github.com/Vaibhavr26

#### **Education**

Education	
Mukesh Patel School of Technology Management & Engineering, Mumbai, India Bachelors of Technology Computer Engineering (CGPA - 3.63/4)  • Relevant Courses: Robotics, Embedded Systems, and AI	2017 – May 2023 Expected
Mukesh Patel School of Technology Management & Engineering, Mumbai, India Diploma in Computer Engineering	2017 - 2023
Professional Experience	
AIIMS (All India Institute of Medical Sciences) Hospital, New Delhi, India Research Intern  • Research Project to Implement Robotic Oral Surgery Using a Robotic Arm and Develop Control Systems using ROS and Python for the Robot  • Project funded by the ICMR (Indian Council of Medical Research)	Feb 2021 – Feb 2023
Granuler: CIO Consulting, Mumbai, India Intern  • Project CRM (Customer Relation Management Implementation)  - Implemented a CRM system for Granuler CIO Consulting.  - Gathered requirements from the client and finalized them on HubSpot CRM. Implemented them and trained the client on the same.  • Project RPA (Robotic Process Automation)  - Used UiPath to automate the CEOs workflow by reducing the time to less than 30 mins	Jan 2020 – May 2020
Intelligence Node, Mumbai, India  QA Intern  • Learned the basics of web applications, understood beta testing, and implemented tests on multiple web applications.	Jul 2018
Academic Projects	
<ul> <li>Chronic Disease Detection System using Machine Learning</li> <li>B. Tech Final Year Project</li> <li>Developed an expert system used to detect/predict various chronic diseases by collecting various health details of a patient using Machine Learning models to provide a helping hand to doctors.</li> <li>With an accuracy of over 90%</li> <li>Implemented for: COVID-19, Pneumonia, Heart Disease, Chronic Kidney Disease, Diabetes</li> </ul>	2021 - 2022
<ul> <li>Home Automation</li> <li>Developed a complete system to control most electronics from a mobile phone or using voice commands on google assistant.</li> <li>Achieved this using ESP-8266 microcontroller. Some electronics include Lights, fans, Air conditioners, and RGB-controlled lights.</li> </ul>	2020
<ul> <li>Soft Robotics Hand</li> <li>Developing a Soft Robotics Hand controlled by stepper motors that will be able to grab almost any object</li> <li>It reads my hand's position using OpenCV and replicates it onto the robotic hand.</li> <li>The future scope is to assist doctors in holding specific tools during surgery.</li> </ul>	2022
<ul> <li>Skin Disease Detection</li> <li>Created a machine learning model by using Transfer Learning with CNN (Convolutional Neural Network) to detect over 20 Skin Diseases with an accuracy of 90%</li> </ul>	2019
Publications	

#### **Publications**

### Multi-Disease Prediction System using Machine Learning

2022

IEEE International Conference on Futuristic Technologies (INCOFT)

## **Extra-Curricular Activates**

Latia-Curricular Activates	
<ul> <li>Intelligent Ground Vehicle Competition, Detroit MI, USA</li> <li>Vice-Captain</li> <li>Achieved 3rd place at an annual international competition hosted at Oakland University, Michigan, in which multidisciplinary teams compete to create an autonomous vehicle according to a set of rules in order to compete. Developed a fully functioning autonomous vehicle with object detection, path planning &amp; traversal.</li> </ul>	2020 - 2022
<ul> <li>Rotaract Club of Bombay Airport, Mumbai, India</li> <li>Board of Director of Club Service from 2020-21</li> <li>Managed and initiated all Club Service activities, supervised and coordinated the work of the committees appointed for particular aspects of Club Service and ensured the smooth and effective running of the club, and created a climate and culture that made our club inviting, appealing, and attractive.</li> </ul>	2019 – 2021
<ul> <li>e-Yantra Robotics Competition (eYRC), Mumbai, India</li> <li>Participated in a competition held by IIT Bombay. Our task was to make a drone for the delivery of parcels.</li> </ul>	2020 - 2021
<ul> <li>The Editorial Project by MPSTME, Mumbai, India</li> <li>Head of Logistics</li> <li>Managed and organized a concert by The Local Train at JRM Grounds</li> </ul>	2019 - 2020
<ul> <li>Lane Detection using Hough Transform and Histogram</li> <li>Wrote an article to explain lane detection using computer vision using the Hough Transform. This article has approximately 400 reads.</li> </ul>	2019
Roller Hockey, Mumbai, India Team Captain  • Achieved 3rd place in a National Level Roller Hockey Tournament in Haryana.	2012 - 2013

## **Technical Skills**

Programming	Micro-Controller Boards	Software
<ul><li>Python</li></ul>	<ul> <li>Arduino</li> </ul>	• Fusion 360
• C++	<ul> <li>Raspberry Pi</li> </ul>	<ul> <li>MS Office</li> </ul>
• ROS		

• Machine Learning