Rahul Gopal

31,N.G.O Colony,Chromepet • Chennai, 600044 • rahul18082000@gmail.com • 8667517761

Education

Indian Institute of Information and Technology, Design and Manufacturing Kancheepuram, Tamil Nadu
B. Tech, Mechanical Engineering. May 2022
CGPA:8.39

S.R.D.F. Vivekananda Vidyalaya Chennai, Tamil Nadu
XII (12th CBSE) March 2018
 Mark: 451/500

S.R.D.F. Vivekananda Vidyalaya Chennai, Tamil Nadu
X (10th CBSE) March 2016
CGPA: 9.2

Online Degree

IIT Madras Online
Diploma in Data Science Jan 2024 - Present

Experience

Capgemini August 2022 – December 2023
Senior Analyst

- As a ServiceNow Developer at Capgemini, led implementation and customization of various ServiceNow applications, including Incident Management, Problem Management, and Service Catalog.
- Used JavaScript, SOAP, and REST to develop high-level designs, customize solutions, and manage day-to-day activities such as system administration and bug fixes, ensuring efficient operation of ServiceNow instances.
- Additionally, demonstrated proficiency in building bi-directional integrations with third-party applications using REST API, and SOAP Service.

Technical Skills

Programming Language: C++, Python, SQL, Matlab
Tools & Utility: ServiceNow
Python Libraries: scikit-learn, Pandas, SciPy, NumPy, Matplotlib, BeautifulSoup, SciPy
Cloud computing: Azure
Modeling : Solidworks, Catia , Autocad
Simulation: Ansys, MATLAB Simulink, LabVIEW

Academic Projects

Bio-inspired compliant gripper Jan 2022 - May 2022
Guide: Dr. Sreekumar
In this project, a gripper was designed for handling soft objects using a compliant slider crank mechanism. Two types of grippers with a single moving part and two moving parts based on the mechanism of the crab were designed. The gripper was fabricated using a 3D Printer. The material of the gripper is PLA. The fabricated gripper was tested to hold various objects like tomatoes, toys, plastic bottles, etc.

Detection and picking of metal object within system Dec 2019-Jan 2020
Guide: Dr. Murali and Dr. Senthilnathan
The objective of the project is to detect objects placed within the system, pick the object, and place it at the specified location. The pick and place robotic arm is a controller-based mechatronic system that detects the object, picks that object from the source location, and places it at the desired location. Knowledge gained/applied: Image Processing, Arduino, MATLAB.

Personal Project

Human Face Recognition Using Image Processing   January 2023
Data was collected using web scraping to collect data, then data was cleaned using opencv face detection, and feature engineering was performed using wavelet transforms. The model was built using SVM. Finally, the Model was fine-tuned using GridSearchCV.

Data analysis and visualization of SpaceX launching   November 2022
Data from SpaceX API and Wikipedia was used to create landing outcome labels and fill missing Payload Mass values with the mean. Exploratory data analysis was performed via visualization and SQL, while predictive analysis compared classification models (KNN, Logistic Regression, SVM, Decision Trees) for landing outcome prediction.

Minor Course Projects

Automatic beach cleaning robot   Feb 2021 - April 2021
Designed a comprehensive waste collection system specifically tailored for beach environments, for which modeling was done in Solidworks and simulated in ROS

Swift Seats   July 2019 - April 2020
Developed an automatic seat allocation system for public buses, utilizing a first-come-first-serve basis to efficiently assign seats to passengers.

Certification

IBM Applied AI   May 2023
Coursera-IBM

Azure AI Fundamental   January 2023
Microsoft (Valid up to January 2025)

IBM Data Science   November 2022
Coursera-IBM

Data analytics with python   April 2022
NPTEL-IIT Roorkee (topper of the batch)

Robotics: Basic and Selected Advance concepts   April 2021
NPTEL, IISC Bangalore

Python for everyone   May 2020
Coursera-University of Michigan

Wheeled mobile robots   March 2021
NPTEL, IIT Madras

Workshop attended

Neural Networks and Deep Learning   1st Feb 2020 to 8st Feb 2020
presented by Dr.Senthilnathan, Ms.Rajalakshmi Ms.Madhumitha
organized by Department of Mechatronics ,SRMIST

Automotive Mechatronics   04th Jan 2021 to 08th Jan 2021
presented by Dr. M.Bharathiraja & Mr. KA. Krishnaa
organized by SAEISS