ROHIT GUPTA

rohitgupta3821@gmail.com | +44 7448622445 | https://www.linkedin.com/in/rohitgupta38/
Portfolio:- https://github.com/Rohit-Gupta2 | Sheffield, UK | Work Location:- Anywhere across U.K.

EDUCATION

MASTER OF SCIENCE AUTOMATION, CONTROL AND ROBOTICS Sheffield, UK
Sheffield Hallam University Jan-2023 - present
Key modules: - Artificial Intelligence, Advance Control, Systems on Chip, Robotics and Machine Vision

MASTER OF SCIENCE AEROSPACE AND ASTRONAUTICAL ENGINEERING Forli, Italy
University of Bologna Nov-2016 – Oct-2019
Key modules: - Automatic Flight Control, Flight Dynamics, CFD, Numerical Analysis, Design Methods in Aerospace, Radar systems, Aerospace Materials, Aerospace Propulsion systems, Structures and Aerodynamics

BACHELOR OF TECHNOLOGY AERONAUTICAL ENGINEERING Hyderabad, India
Mahaveer Institute of Science and Technology (JNTU) Sep-2011 – Jun-2015

TECHNICAL-SKILLS

Programming Languages: Python, Matlab & Simulink, Git, Intel Quartus Prime, System Verilog
Frameworks: Pytorch, TensorFlow, OpenCV, Scikit-Learn, Streamlit, Matlab Toolboxes
Automation: PLC Programming , SFC, Siemens Tia Portal, HMI design
CFD & CAD: Ansys, SolidWorks, Simscale, XFLR, JavaProp
Cloud & Ops: Microsoft Azure, Git Actions, Docker
Office suites: Tableau, MS Office

PROJECTS AND ACADEMIC REASEARCH

- Autonomous Car Parking and Car Obstacle Avoidance using Model Predictive Controller in Python
- 2D Kalman Filter Traffic Light Prediction and 1D Kalman Filter on a car
- Streamlit Webapp using Yolov8 model, Semantic segmentation on Images and Videos
- Implementation of Fault Detection, diagnosis & Isolation on a system plant using Simulink
- Multi-Class Classification on Cleveland Heart disease dataset to predict the severity of heart disease
- Processing and Analyzing an Image, Real-Time Tracking of different Shapes, Color
- PLC Programming in TIA Portal, HMI design and PID implementation on Reactor Station
- Various Data science and Machine Learning Projects
- Design optimization for Low-Boom Supersonic Aircraft
- Altitude Airspeed Autopilot for Piper PA30 aircraft
- 3D Printing LEGO model on a FORTUS 250 3D printer
- CFD simulation on a NACA0012 Airfoil at different angle of attack and different Turbulence models
- Design and Analysis of Electrical Trainer Aircraft
- Composite Manufacturing of Propeller blades and Laminates
- Design optimization of lattice Structures in Additive Manufacturing
- Turbulent flow and drag optimization for a blunt nose body configuration
- Link for all the Projects:- https://github.com/Rohit-Gupta2

EXPERIENCES

Freelancer | Additive Manufacturing Engineer Feb-2021 - Jun-2021
Design and manufacture a prototype with Minimum possible wall thickness using any Additive manufacturing
CAE Engineer Intern| Simulation Lab – Product Development Center Apr-2020 - Jun-2020
Simulations on a Contra-Rotating Propeller for Optimizing Thrust
CFD/FEA Trainee | Simscale | CFD & FEA Projects and workshops Jan-2018 - Oct - 2018
Link for projects: - https://www.simscale.com/users/RohitGupta_2138/
Student Intern | University of Bologna - Hangar Laboratory, Forli Airport Mar-2018 - May-2018
Conceptual design of High-Altitude Long Endurance Unmanned Aerial Vehicle
Administrative support at Language Center | University of Bologna, Forli, Italy Jan-2018 – Mar-2018
Associate Account Receivable | Inventures Knowledge Solutions, Hyderabad India Sep-2015 - Sep-2016
Verifying Clients Payments and maintaining customer records
Student Trainee | Bharath Dynamics Limited, Hyderabad India Jul-2014 to Aug 2014
Manufacturing of Milan Missile component (Long Shell) performed on CNC Machine using G-code and M-code Programming language