PRATEEK NANHORYA

Course : **B.E. (Hons.)**, Mechanical Engineering, 2023
Email : f20190564@goa.bits-pilani.ac.in
Mobile : 9340911495
CGPA : 7.74

Subjects / Electives	CAD (Computer Aided Design),DME (Design of Machine Elements),Microfluidics,Kinematics and Dynamics,Manufacturing Processes,Fluid Mechanics,Heat Transfer,Micro Electro-Mechanical Systems (MEMS)
Technical Proficiency	Linux platform,Rust,C++ Language,Python3,Data Structures,Algorithms,Object-Oriented Programming (OOP),Artificial Intelligence,Machine Learning,Robotic Systems,ROS,ROS2,Microcontrollers,Robotic Process Automation,Control Systems Design,Markdown,Docker,FreeCAD,COMSOL,Python,C Programming,React.js

SUMMER INTERNSHIP / WORK EXPERIENCE

Robotics R&D, UST Global   **Jul 2022 - Dec 2022**
Autonomous Mobile Robot (**AMR**) **development** with modern path planning algorithms

PURPOSE: Improve efficiency in warehouse management.

- Wrote algorithms and programming code for odometry implementation.
- Processed and interpreted signals and sensor data.
- Developed new nodes in ROS2 foxy.
- Debugged robotics programs.
- Implemented mapping and navigation algorithms using SLAM and NAV2.
- Developed c++ code for new dynamic navigation algorithm RRT*
- IsacSim simulation of warehouse environment.
- Using FoxGlove to determine and rectify faults
- Worked with numerous micro-controllers, motor-drivers.

Research, Aditya Birla (Ultratech Cement)   **May 2021 - Jul 2021**
Study about the electrostatic effects of dust accumulator and how it is
implemented.

PROJECTS

Development of flexible Robot - Robotics   **Jan 2023 - Present**
Currently Working...

Automotive Mobile Robot for Dynamic warehouse environments - Robotics   **Jun 2022 - Dec 2022**

HMCS device for Inflatable Structures in space. - MEMS @ BITS   **Jan 2022 - Apr 2022**

CERTIFICATIONS

CERTIFICATION	CERTIFYING AUTHORITY
Introduction to Machine Learning	Kaggle
Intermediate Machine Learning	Kaggle
Pandas	Kaggle
ROS for beginners (ROS Noetic)	Udemy
Intro to Programming	Kaggle
Data Visualization	Kaggle
Python	Kaggle
Docker Beginner's course	KodeKloud

OTHER ACADEMIC DETAILS

COURSE	SPECIALIZATION	INSTITUTE/COLLEGE	BOARD/UNIVERSITY	SCORE	YEAR
CLASS XII	SCIENCE	International Public School, Bhopal	CBSE	89 %	2018
CLASS X		International Public School, Bhopal	CBSE	10 CGPA	2016

POSITION OF RESPONSIBILITY

POSITION OF RESPONSIBILITY

DoCW Core Member - Department of Creative Works   **Aug 2021 - Aug 2022**

CONFERENCES AND WORKSHOPS

Getting started with Postman
Organized by: **BITS Pilani, Pilani campus** | Date:
Development with ROS2
Organized by: **The Construct** | Date: **Aug 2022**

LANGUAGES KNOWN

English, Hindi, French

EXTRA CURRICULAR ACTIVITIES

Chess
Calisthenics
Sports
- Badminton
- Table Tennis
- Cricket
- Football

Runnning/Sprinting

SCHOLARSHIPS

MCN Scholaarship   **Oct 2022**