

Krushnal Patel

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SKILLS

LANGUAGES

C++ • HTML/CSS • L^AT_EX

Python • JavaScript

TOOLS+TECH

ROS/ROS2 • Linux • ReactJS
NodeJS • git

SOFT SKILLS

Leadership • Communication

EDUCATION

DELHI TECHNOLOGICAL UNIVERSITY

B.TECH IN COMPUTER ENGG.

Expected 2023 | New Delhi

Cum. GPA: 7.34/10

(as of III semester)

NEW MILLENNIUM SCHOOL

CBSE XII - SCIENCE

2019 | Bahrain

Percentage: 91%

SCHOLAR'S BADGE

INDIAN SCHOOL, BAHRAIN

CBSE X

2017 | Bahrain

Cum. GPA: 9.6/10

AREAS OF INTERESTS

Software development enthusiast specializing in autonomous mobility, Web Development and robotics. Other hobbies and interests include cybersecurity and Artificial Intelligence.

LINKS

GitHub:// krush11

LinkedIn:// krushnal

My Portfolio: krushnal.me

SOCIETIES

COGNITIVE MINDS

DEBATING Co-HEAD

2020 - Present

- Participated in various debating competitions including IIT-BHU and IIT-Kanpur fests

EXPERIENCE

DEFIANZ RACING

Oct 2020 - Present | New Delhi

- Part of a team that aims to make the **1st autonomous F1 car in India**
- Integrated robust Path Planning algorithm using **RRT** on **ROS noetic**
- Responsible for integration of **SLAM** into **ROS framework**
- Tuned and tested the simulation intensely to bring out the best performance of the vehicle

NAVIGATION LEAD

DTU SELF-DRIVING CARS

Dec 2019 - Sept 2020 | New Delhi

SOFTWARE ARCHITECT

- Developed software suite of an autonomous vehicle for **IGVC'20** (*canceled due to COVID'19*)
- Integrated data from sensors into **ROS framework** with **NMEA 0183** compliance
- Build custom arduino scripts to extract data from rotary encoders

CODING NINJAS

Sept 2020 - Jan 2021 | Online

TEACHING ASSISTANT

- Mentored a batch of 20 students in competitive coding in C++
- Resolved bugs in MERN stack
- Evaluated NodeJS and ReactJS projects

TECHNICAL PROJECTS

WALL FOLLOWING ROBOT

ROS, Linux, git

- Built a center wall following robot simulation using **roscpp** and **rospy**
- Designed the **URDF** and customized it by adding a lidar plugin into **Gazebo11**
- Developed a 4x1 multiplexer to integrate all nodes to control **ackermann** drive

OPEN SOURCE CONTRIBUTIONS

- OpenCV **openCV**: PR # 19301
- OpenCV **openCV**: PR # 18590
- Google **gnostic**: PR # 226
- Frappe **erpnext**: PR # 23933