

# Krushnal Patel

+91 7778091174 | krushnalpatel11@gmail.com

## SKILLS

### LANGUAGES

C++ • Python •  $\LaTeX$  • JavaScript  
HTML/CSS

### TOOLS+TECH

Linux • ReactJS • NodeJS • ROS  
MongoDB • Azure • Socket.IO  
CI/CD • VCS

### SOFT SKILLS

Leadership • Communication

## EDUCATION

### DELHI TECHNOLOGICAL UNIVERSITY

B.TECH IN COMPUTER ENGG.

Expected 2023 | New Delhi

Cum. GPA: 7.74/10

(as of IV semester)

## OSS CONTRIBUTIONS

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

## 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

JOINT SECRETARY

2020 - Present

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

## EXPERIENCE

### LINUX MENTORSHIP PROGRAM @ ATOM

STUDENT DEVELOPER

June 2021 - Aug 2021 | International

- Selected as one of the **200 students worldwide till date** for a 3 month mentorship program
- Made major contributions in improvement of the extensions of assembly languages **PL/X**, **Rexx**, **NAMES** and **gml** on **ATOM**
- Improved the **syntax highlighters** adding support for macro statements, keywords identifiers etc. by designing required regexp
- Published the packages to **ATOM registry** and are now used heavily for improved coding experience by **1000+ developers** in companies like **IBM**

### OGMEN ROBOTICS

SOFTWARE DEVELOPER INTERN

June 2021 - Aug 2021 | New Delhi

- Developed **web sockets-based** video conferencing app using **TCP** using **ZoomSDK's API**
- Integrated remote joystick control for robots in real-time using **ROSBridge server** through a NodeJs server with a low-latency of **<300ms**
- Implemented two-way data transfer using **Socket-IO** in a **polyglot** environment
- Used **ngrok** for **ssh tunneling** as a workaround for blocked port forwarding.

### CODING NINJAS

TEACHING ASSISTANT

Sept 2020 - Jan 2021 | Online

- Mentored a batch of 20 students in competitive coding
- Debugged codes and assignments in C++14 and higher

## TECHNICAL PROJECTS

### DEFIANZ RACING

SOFTWARE LEAD

Oct 2020 - Present | New Delhi

- Part of a team that aims to make the **1st autonomous F1 car in India**
- Built **pure pursuit** lateral controller and integrated it along with **PID**
- Responsible for integration of **SLAM** into **ROS framework**
- Designed and deployed the **official team website** using **NodeJS** and **MongoDB**
- Responsible for maintenance and addition of new features to the website

### DTU SELF-DRIVING CARS

SOFTWARE ARCHITECT

Dec 2019 - Sept 2020 | New Delhi

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

### SIMPLIGIT

npmjs.com/simpligit

npm, git, JavaScript

- A **guided CLI** for **git** to aid new developers to use git.
- Achieved **over 400+ downloads** and users within a week