

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