

## EDUCATION

### B. Tech Computer Science and Engineering Rajiv Gandhi Institute of Petroleum Technology

01/2021 - Present CPI-7.4(till-5th semester)

### Intermediate(CBSE) Sarvodaya Senior Secondary School, Kota

03/2017 - 04/2019 percentage-72.2

### Matriculation Sarvodaya Senior Secondary School, Kota

04/2016 - 03/2017 CGPA- 9.2

## PROJECTS

### AI/ML-Based Corner, Edge, and Surface Reconstruction from Point Clouds (08/2022 - 01/2023)

- Developed three methods for corner detection, edge detection and surface reconstruction in point clouds
- Used multiprocessing which enhanced performance by great margin
- Carried out computations of project work on High Performance Computer
- Stack Used- Python, Numpy, Sklearn, Matplotlib, Open3D.
- [Github](#)

### College Metaverse- Virtual 3d environment (06/2022 - Present)

- A metaverse of RGIPT college where you can play games and do virtual meeting in virtual reality.
- It's a place where college events can be organized and it provides a 3D virtual campus tour.
- 3D virtual administrative office which provides facilities to the students to see their records i.e. fees, library dues, academic, co-scholastic and other things.
- Stack Used-HTML, CSS, JavaScript, Python, Blender, Google Map API

### 3D live simulation of obstacles around a running vehicle (12/2021 - 02/2022)

- The project map was designed on 3D GIS map of RGIPT campus and then was executed on the live map by taking live GPS coordinates of vehicles.
- Using Object detection to detect object and lidar sensor for getting the distance between the car and object then projecting all the data on a 3D modelling software.
- Stack Used- Yolov3 custom object detection model, Python, Google Firebase, Blender, OpenStreetMap GIS.
- Technology Used- Raspberry Pi4, TFMini Lidar Sensor.
- [Demo](#)

### Gyroscope Controlled Bot (09/2021 - 10/2021)

- A bot that can be controlled by gyroscope sensor of an Android device via Bluetooth.
- Stack Used- C Language, MIT App Inventor(Block Coding).
- Technology Used- Arduino Uno, HC-05 Bluetooth Module.
- [Github Demo](#)

### Phone Controlled Bot (07/2021 - 09/2021)

- A bot that communicates using DTMF technology. It operates when a user call this bot using a cellphone and dial numbers on the call screen.
- Technology Used- Arduino Uno, SIM808 GSM Module.
- [Github Demo](#)

## SKILLS

Programming: Python, C, HTML/CSS, JavaScript, Matlab

Tools: Git/Github, Blender, VS Code, Azure, MySQL

Libraries: Pandas, NumPy, Matplotlib, PyTorch, PyTorch Geometric, Open3D, Sklearn, Plotly

## POSITIONS OF RESPONSIBILITY

Tinkering Lab(Science and Technical Council RGIPT (01/2023 - Present)

*Coordinator*

Tinkering Lab(Science and Technical Council RGIPT) (10/2021 - 12/2022)

*Executive*

## PUBLICATIONS

A Sustainable Traffic Management System for Smart Cities

[Certificate](#)

Machine Learning-Based Automation of Corner, Edge, and Surface Extraction from Point Cloud Data at High Resolution

*Communicated*

Emotion Recognition using Multimodal Features from HOG and LBP

*Communicated*

## LANGUAGES

English

*Full Professional Proficiency*

Hindi

*Full Professional Proficiency*

## AREAS OF INTEREST

Deep Learning

Computer Vision

Geometric Deep Learning

Robotics

Machine Learning

Metaverse

Graph Neural Network