

## PROJECT EXPERIENCE

Portfolio: <https://hiteshhdwig.github.io/>

### Mini Projects:

Aug 2020 – Current

- [Project SED-ev](#): A state-of-the-art self driving vision system that can efficiently perform the following:
  - Pedestrian detection(Using HOG), License plate detection (Using Detectron2), Car & Traffic light detection(Using Yolov4), Lane detection and tracking(Using Traditional Computer Vision).
- [ThatsTheBreed](#): End to End FastAI based dog's breed detection model deployed with 85% accuracy
- [COVIZ-ualise](#): Deployed interactive dashboard on heroku website using flask to gain data insight from COVID-19 with powerful visualisation tools like plotly, matplotlib.

### Mars Rover(Team InfernoDTU)

Aug 2018 – Jan 2019

*Software Head*

- Led the group of 7 members in the development of Mars Rover Prototype to compete in competitions.
  - Improved quality of code & algorithm to significantly reduce the cost of hardware by 60%.
- Built system which uses GPS waypoints for navigation and Object detection using OpenCV in real time.
- Collected, retrieved, and debugged raw data while testing rover for efficient real-time performance.

### Go-Kart(Team InfernoDTU)

Oct 2017– May 2018

*Machine vision researcher*

- Planning and presenting comprehensive reports on traffic signs, lane departure detection and ultrasonic sensor implementation process on affordable hardware.
- Trained Keras based CNN model achieved 98% accuracy for Dog vs Cat detection.

## ACHIEVEMENTS

- Team Inferno DTU participated and won the 1st prize in skidpad and runner-up in autocross, at International Go-Kart Championship'18 (IGC'18).
- Team Inferno DTU participated at Indian Rover Challenge(IRC'19) held in Manipal Institute of Technology and secured 7th position among the 32 teams from 5 countries across the world.
- Completed 'Data Science Math Skills(Coursera)', 'Python Data Structures(Coursera)', 'Data Visualization (Kaggle)', 'AWS Machine Learning Foundation Course(Udacity)', 'Modern Deep Convolutional Neural Networks with Pytorch(Udemy)'.

## EDUCATION

### Delhi Technological University(formerly DCE)

Class of 2020

*B.Tech - Mechanical Engineering*

*New Delhi, India*

**Kendriya Vidyalaya, Masjid Moth - XII<sup>th</sup> Class**

2016

**Kendriya Vidyalaya, Masjid Moth - X<sup>th</sup> Class**

2014

## SKILLS & INTERESTS

- Python, C++, SQL, HTML, CSS
  - Computer Vision
  - Machine learning(such as
  - k-NN, Naive Bayes, SVM, Decision Forests Etc)
  - Deep learning(such as Pytorch, tensorflow, keras)
  - Data mining
  - NLP
  - Data Visualization
  - Management
- **Interests** : Meeting new people, basic korean speaking and reading, avid novel reader, documentaries, animal facts, listening to classical music, reading history.