

PROJECT EXPERIENCE

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

SynergyLabs, Gurgaon

Feb 2021 – Current

Deep Learning Intern

- Worked closely with the founder in the development of the “VCAM” product.
 - o Generated, organized, cleaned data & trained MobilenetV2 reduced size from 3.2MB to 2MB
 - o Used golang to implement “SIMILAR” and “PULSE” mode functionalities to the backend.
 - o Executed field tests, debugged realtime, deployed firmware on raspberry pi.
 - o Built Multifunctional UI in python which communicates over RS485 to the system for video analytics.
 - o Communicated and conveyed product functionalities to Clients and improved over feedback
 - o Devised comprehensive informative UserManual for clients.

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.
 - o 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.
- Presented reports in the competition among judges validate the team's actions and thought process.

ACHIEVEMENTS & EXTRA Projects

- Research paper published “Estimation Of Surface Roughness in turning operations using Multivariate Polynomial Regression” in Scopus Indexed journal - FLAME (2020)
- 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.
- Team Inferno DTU participated and won the 1st prize in skidpad and runner-up in autocross, at International Go-Kart Championship'18 (IGC'18).
- 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)’.
- MiniProjects: [ThatsTheBreed](#), [Project SED-ev](#), [COVIZ-ualise](#)

EDUCATION

Delhi Technological University(formerly DCE)

Class of 2020

B.Tech - Mechanical Engineering

New Delhi, India

Kendriya Vidyalaya, Masjid Moth - XIIth Class (2016) , Xth Class (2014)

SKILLS & INTERESTS

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