

## Education

### B.Tech | IIT JODHPUR

Computer Science and Engineering  
CGPA : 8.63/10.0 | Expected 2021

### Senior Secondary | CBSE

Dr. V.S.E.C School  
Percentage : 95.00% | 2016

### Secondary | CBSE

Dr. V.S.E.C School  
CGPA : 10/10 | 2014

## Technical Skills

### Programming Languages

•C •C++ •Python

### Deep Learning

•TensorFlow •Keras •Neural Networks  
•Deep Reinforcement Learning

### Robotics

•OpenCV •Microcontrollers and Sensors  
•Automation •IOT

### Web Development

•HTML •CSS •Django

### Others

•Sports Programming •Git •Microsoft  
Azure •Microsoft Kinect Sensor

## Position of Responsibility

### Captain | Robotics Club

2019-2020

### Vice-Captain | Robotics Club

2018-2019

## Coursework

Data Structure and Algorithms  
Algorithm Design \*  
Quantum Information \*  
Object Oriented Analysis and Design  
Discrete Mathematics  
Calculus and Linear Algebra  
Operating Systems \*  
Computer Organization and  
Architecture  
Data Communication \*  
Compiler Design \*  
(\* ongoing courses)

## MOOC's

MIT OCW: Introduction to Algorithms  
Coursera: Deep Learning Specialization  
CS231n: CNN's for Visual Recognition

## Internship

### MAVI-Mobility Assistant for Visually Impaired | IIT Delhi

Supervisor - Prof. Chetan Arora [May 2019 - Present]

- Currently working on research project - Uncertainty in Object Detection using Deep Neural Networks.
- Successfully improved accuracy of animal detection from 76% to 84%.
- Made a Device for capturing image frames, uploading it to server and detecting real-time objects using raspberry pi and movidius neural stick.

### Segmentation of Objects in Image through Captions | IIT Jodhpur

Supervisor - Prof. Anand Mishra [Aug 2019 - Present]

- Working on object detection and pixel level segmentation using Graph Algorithms and Deep Learning.

## Projects

### Trinetra - A device for Visually Impaired People

Supervisor - Prof. Chiranjoy Chattopadhyay [Jan 2019- April 2019]

- Successfully built a device equipped with Microsoft kinect camera for assisting visually impaired people.
- Device capable of Object Detection, Depth estimation, Face Recognition, OCR, Speech Recognition, Image Captioning and Video Calling.

### Inter College Collaboration and Query Portal

Supervisor - Prof. Sumit Kalra [Jan 2019- April 2019]

- Created inter college communication and query portal using MVC paradigm in Django.
- System Designing, Agile process, MVC pattern, GANTT chart and testing techniques were important milestones.

### Earthquake prediction through IOT and Azure IOT Hub

CodeFunDo++ | Second Runner Up [Aug 2018- Sep 2018]

- Deployed on Azure IOT Hub for communication between server and client Raspberry Pi's for exchange of IMU sensor data.
- Automatic Home alarming system controlled from server through IOT.

### Github Repository for Robotics and Deep Learning projects

Github | Robotics Club [Active]

- Github Repository of official Robotics Club Website written in Django for feedback, issue materials, share projects and other club updates.
- Github Repository containing implementations of various Deep Neural Networks Applications.

## Achievements and Participation

- Secured Bronze Medal at Inter IIT Tech Meet 2018 in Campus Sustainability Challenge.
- Second Runner Up in Microsoft Codefundo++ 2018 Hackathon.
- Core-member for setting up Innovation and Incubation Centre at the Institute funded by MHRD.
- Winner of Intra-Hostel DTMF-based Bot Control Competition.
- Second Runner Up at Intra-Hostel Coding Contest.
- Among 0.5% in JEE Advanced 2017 by securing 2881 rank.
- Participated at ACM-ICPC, SIH, Createch, Techfest.
- Technical event organizer at Nimble and Ignus.