

# Harshit Agrawal

[harshit.agrawal.work@gmail.com](mailto:harshit.agrawal.work@gmail.com) | +91 7016004637

## EDUCATION

### NIT, TRICHY - B.TECH

MAJOR IN COMPUTER SCIENCE

MINOR IN ECONOMICS

Expected May 2022 | Trichy, India

Cum. GPA: 9.58/10.00

### K D AMBANI VIDYAMANDIR

Grad. May 2018 | Jamnagar, India

Class 12 : 94.8 %

Class 10 : 10 CGPA

## LINKS

GitHub: [@HarshitCodex](#)

LinkedIn: [@HarshitAgrawal](#)

Codechef: [@codexharsh](#)

Codeforces: [@codexharsh](#)

Hackerrank: [@HELICpros](#)

Medium: [@HarshitAgrawal](#)

## COURSEWORK

### UNDERGRADUATE

Deep Learning

Cryptography

Machine Learning

Algorithms & Data Structures

Operating Systems

Computer Networks

Android AppDev

Theory of Computation

Database Management Systems

Probability & Graph Theory

### CERTIFICATIONS | ONLINE

[Machine Learning](#)

[Deep Learning Specialization](#)

[WebDev\(Ongoing\)](#)

[Python\(Ongoing\)](#)

## SKILLS

### PROGRAMMING LANGUAGES

• C • C++ • Java • Javascript • Python

### FAMILIAR TOOLS & TECH

• Android Dev • Web Dev • ML

• Scraping • Matlab • Keras • Pytorch

• Scikit • Git • Scripts

### LANGUAGES

• English • Hindi

### CO CURRICULAR

• NIT Trichy Basketball Team 2018-19

• Jamnagar Basketball Team 2016-17

• District Cricket Team 2016-17

• CBSE Heritage Quiz 2016

## EXPERIENCE

### SPIDER R&D CLUB | ALGORITHMS AND MACHINE LEARNING

August 2019 - Present | NIT Trichy, India

- Worked on Enhanced Night Vision prototype using Deep Learning
- Conducted Algotrix algorithms workshop for over 100 college students
- Headed and worked as problem setter for various Coding Contests
- Participated in ICPC-2019 Online Round with team ApPy Fuzz
- Represented the club at many hackathons with a dynamic team of students

### VORTEX CSE TECHNICAL FEST | EVENT MANAGER

September 2019 - Present | NIT Trichy, India

- Part of versatile team of managers and computer science enthusiasts
- Ideated and organised various coding based events round the year for Vortex Technical Fest, including online events from home
- Judged and worked as a problem setter for Talkathon, Triathlon, ML and Coding Events

## PROJECTS

### DARKSIGHT | [Github : DarkSight](#) | SANGAM PROJECT

December 2019 - March 2021

- Worked on improving night-vision cameras
- Used Histogram Equalization and U-Net Deep Learning framework
- Worked with python libraries and automated few processes
- Used Samba server to ssh from Windows 10 to Raspberry Pi

### TAKEASTAND.ORG | [Github : TakeAStanf](#)

January 2021 - January 2021

- Created a mini social media website to host and join protests
- Worked with MEN stack with HTML, CSS and JS for frontend
- Added Maps API for instant location service

### STOCK ANALYSIS | [Github : ARIMA-NLP](#) | STOCK SENTIMENT

September 2020 - November 2020

- Worked on ARIMA model to map Google S&P500 stock price
- Used log differencing and normal differencing to get stationary data
- Scraped stock related news using web scraping techniques in python
- Used NLP techniques with VADER lexicon to generate sentiment score of stock

### SAFE LANES | [Github : Safe Lanes](#) | PRAGYAN HACKATHON

December 2019 - December 2019

- Identified safest route between two points by ML algorithm
- Generated Crime score of each street through Crime dataset
- Used Random Forest Classifier as ensembling algorithm to predict crime

### HANDGUN DETECTOR | [Github : YOLO Guns](#)

June 2019 - August 2019

- Detection and drawing of bounding boxes whenever Handguns are found
- Worked to design YOLOv3 architecture using Darknet54 framework
- Used Convolutional Neural Networks and FPN with RPN

## ACHIEVEMENTS

2020	<b>Selected</b>	SRFP Fellowship(IIT-M Computer Vision)
2020	<b>Top 15%</b>	Transfinite Hackathon
2020	<b>Top 10%</b>	Hackverse(NITK) Hackathon
2019	<b>2nd Prize</b>	Pragyan Hackathon 2019
2018	<b>AIR 1024</b>	KVPY Fellow (Issued by IISc Bangalore)