

# Sahil Aggarwal

<https://www.linkedin.com/in/sahil-aggarwal-61a60b16b/>  
sahil.ee17@iitp.ac.in | +91-9523264162

## EDUCATION

### INDIAN INSTITUTE OF TECHNOLOGY PATNA B.TECH IN ELECTRICAL ENGINEERING

July 2017- Present  
GPA: 7.67/10.0

### TAGORE ACADEMY PUBLIC SCHOOL

2004-2017 | Faridabad, Haryana  
XII Percentage : 92.2%  
CLASS 10th CGPA : 9.8/10.0

## LINKS

Github:// sahil26  
Codeforces:// gs\_sahilagg  
Codechef:// witwicky26  
Wordpress:// sahil-aggarwal

## COURSEWORK

### UNDERGRADUATE

#### Mathematics

Linear Algebra, Two Variable Calculus,  
Probability and Statistics

#### Electrical Engineering (Major)

Signal and Systems

Communication Systems

#### Computer Science (Minor)

Programming and Data structures

Intro to Data Science

Python Programming

## SKILLS

### PROGRAMMING

- Algorithms • Data Structures
- Machine Learning • Deep Learning
- Backend Web Development

### CODING

#### Languages

- C • C++ • Python • SQL • HTML+CSS
- Javascript • Golang

#### Tools and Frameworks

- Unix • Github • Keras • Tensorflow

## MOOCS/ CERTIFICATES

### COURSERA

- Deep Learning Specialisation, Machine Learning By Andrew Ng, • Algorithms Specialisation By Stanford

## PROJECTS

### IMDB MOVIE REVIEWS SENTIMENT ANALYSIS

Jan 2019 – March 2019 | Under Dr. Joydeep Chandra

- Obtained feature vector of words using Bag of Words model with Countvectorizer predicting sentiments using Random Forest classifier.
- Utilised Word2Vec model and implemented Bidirectional LSTM improving F1 Score to 0.91 on test data.

### DISTRACTED DRIVER DETECTION

April-May 2020 | Design Lab

- Employed VGG-16 network and trained it on extra layers to predict what each driver is doing in each of the pictures.
- Also tuned the parameters, trained it on all layers in 10 classes and built XceptionNet model minimising cost using SGD optimizer achieving an accuracy of 83.5%.

### NEURAL STYLE TRANSFER | TRANSFER LEARNING

Aug 2019 –Sept 2019

- Employed VGG-19 network generating an image of museum (content image), mixed with a painting (style image).
- Implemented content cost function using activations and style cost function using Gram matrix and used Adam optimizer minimizing cost function.

### STOCK PRICE PREDICTION

Jan 2020

- Worked on Vanguard Total Stock Market Index Fund ETF Shares dataset. Employed machine learning algorithms such as Linear Regression and LSTM comparing their performance.

## ACHIEVEMENTS

### COMPETITIVE PROGRAMMING

- Secured a global rank of 281 out of 20,000 participants in August Codechef Long Challenge 2019
- Secured a global rank of 779 in Google Kickstart 2019 Round G
- Codechef Highest Rating: 1789 @witwicky26
- Codeforces Highest Rating: 1408 (Specialist) @gs\_sahilagg
- Solved more than 500+ problems on various sites like Codechef, Codeforces, Hackerrank, UVA, InterviewBit

### JEE ADVANCED

- Secured 95.33 percentile out of 1,50,000 candidates in JEE Advanced 2017

### OLYMPIADS

- Secured 8th State rank in 2nd Level National Science Olympiad (NSO)

## POSITION OF RESPONSIBILITIES

### TASK MANAGER | E-CELL IITP (Events Subcord)

- Organised IPL Auction in Celesta 2k18 and Startup Master Classes (IITK Ass.)

### PROJECT MENTOR | DSC-IITP

- Machine Learning and AI Society of IITP-Mentoring students in field of ML and Artificial Intelligence