# ΑβΗΑΥ **G**UPTA

**IIT Roorkee** 

#### EDUCATION

#### Roorkee, Uttrakhand

- B.Tech. in Electrical Engineering with Minor Specialisation in Computer Science and Engineering.
- CGPA: 8.98/10
- Main coursework: Data Structures, Design and analysis of Algorithms, Database Management Systems, Computer Networks, Operating Systems, Discrete Structures, Artificial Neural Networks.

#### EMPLOYMENT

Member Technical	D. E. Shaw, India	July 2019 - Present
<ul> <li>Part of the Futures Trading strategy group.</li> </ul>	. Contributing to building and maintaining	a next generation time series

- data framework as well as tools to visualize and analyze financial data.Designed and developed a library using which Quants and developers can access data related to various financial
- instruments being traded by the group.

# • Gained experience in software development and python design patterns.

### Software Development Engineer, Intern

- Designed and developed a data validator for D. E. Shaw's data caching framework. The tool helped developers by reducing time to validate cached data by more than 80%.
- All code was reviewed, perfected and pushed to production. Received a full-time job offer.
- The project required knowledge of python and numpy. Also learnt concepts such as caching and memoization.

### **B.TECH. MAJOR PROJECTS**

### Foodistic

- Created a food ordering website using Django and SQLite. Gained knowledge about web development and relational databases.
- The website supported restaurant and customer login and signup. Customers could place orders from multiple restaurants. A restaurant could update and add new items to their menu.

# Artistic Style Transfer in Images

- Developed a deep learning model using CNNs(Convolutional neural networks) that applies filters to target images similar to apps like prisma.
- Using transfer learning, the model was trained on a CPU. The developed deep learning model works in real-time and can also be applied on live videos.

# **Twitter Emotion Recognition Bot**

- Built a sentiment classifier using word2vec model which achieved an accuracy of almost 80 percent.
- Also built a twitter bot which reads live tweets and replies to tweets from a fixed set of replies based on sentiment of the tweet.
- The project was displayed in the annual Technical Exhibition of IIT Roorkee, Shristi-2018.

### LANGUAGES AND TECHNOLOGIES

- Programming Languages Python, Numpy, Scipy, C++, Git, Shell, SQL, HTML, CSS, Javascript, Node.js, Django, Java(Basic), PHP(Basic)
- Others Linux/Unix, Windows, Mac OS, Grafana, GitHub, Android Studio, Arduino, Keras, Tensorflow, Matlab

### ACHIEVEMENTS AND RESPONSIBILITIES

- Student Mentor at Student Mentorship Program, IIT Roorkee: Mentored a group of eight first year students. Organized regular meetings and doubt clearing sessions for them.
- Qualified the prestigious IIT-JEE, 2015 and got All India Rank 1844 among 150,000 candidates who appeared for the exam. Scored All India Rank 1304 in the JEE Mains (2015) among 1.5 million candidates.
- Cleared National Talent Search Scholarship, 2013. Was among the top 1000 students from the country to receive the scholarship.

July 2015 - May 2019

D. E. Shaw, India

May 2018 - July 2018