# Rishab Agarwal

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**EDUCATION** 

2017-2021(EXPECTED)	B.S (Mathematics & Scientific Computing), IIT Kanpur	8.6/10.00
	MINOR IN Machine Learning	
April 2017	Class XII (CBSE) Remal Public School, New Delhi	<b>93.6</b> ~%
APRIL 2015	Class X (CBSE) Delhi Public School Dhanbad	10.0/10.0

#### ${f ACHIEVEMENTS}$

- I have been offered internship by JP Morgan and chase as a software developer for the upcoming summer (May 2021).
- Secured All India Rank 859 in IIT JEE ADVANCED 2017 out of 1.72 lakh applicants; placed at 99.4 percentile.
- Offered an internship at HSBC in global market front office but the offer was rescinded during COVID-19.
- Offered Pre-Placement offer from E-Jet Systems in second year intern for Machine Learning role.
- Secured AIR-80 in KVPY 2015 and received National Talent Search Examination scholarship by NCERT.
- Cleared Regional Mathematics Olympiad'15 and was in top 1 percent in Delhi in NSEP'16.
- International Rank-45, IMO 2015 | International Rank-20, IMO 2016 | International Rank-96, NSO 2015 [SOF].
- AIR-12, Silver Zone Science 2015 | AIR-4 and AIR-10 in level 1 and 2 respectively of Silver Zone Maths 2015.

## WORK EXPERIENCE

• Zomato — Data Science

- Worked on recommendation algorithm (Collaborative filtering) through deep neural networks.
- Visualized user + restaurant vectors and was able to recommend restaurants to users with 89% accuracy.
- Edgistify — Data Science

- Gathered information using Machine Learning about warehouses in India from news articles and social media.
- Trained on **yolov4** architecture to detect advertisement section of newspapers with **97%** accuracy.
- Gathered data from LinkedIn, Facebook, and Twitter as one click scraps data according to user needs.
- Used Google api for building heat map of warehouses across India for user access.
- EJET Systems —— Retrieval-based Chatbot(ML and NLP)

May 2019 - July 2019

- Responsible for end-to-end development of a chatbot that could automate hotel management using **NLP**.
- Built a classifier model to classify user inputs into pre-defined intents using GRU layers and word embeddings in keras and Food entity recognition model to identify food items in a sentence using NLTK.
- Devised an algorithm to recommend food with respect to input provided by the user using **word embeddings**.
- Nutanix, Summer of Code —— Full Stack Developer

May 2018 - July 2018

- Cloud Computing and Web Development internship organised by **Nutanix**, UPSIDC and **IIT Kanpur**.
- Focused on solving social problems through projects as developed a buy and sell platform for farmers and buyers to directly connect to eliminate the role of middlemen.

#### PROJECTS

• SaaS portal for Data Security and Access Management

Jun 2020 - July 2020 http://app-dev.hellospotlight.com

(Austin Osborne, undergraduate **MIT** and MBA **HBS**)

- Using NLP and Deep Neural networks designed parsers for detecting personally identifiable information.
- Using ORMs such as sqlalchemy created database models, used serializers like marshmallow to dump objects into schema and created API endpoints in the backend of a simplified and secure data access management system.
- SARIMA Time Series Analysis (Prof. Amit Mitra, IIT Kanpur)

Sep 2019 - Nov 2019

- Implemented **SARIMA** model in python for Rainfall Data of the last 114 years in India with stationary data.
- Using the **Box-Jenkins Algorithm**, predictive forecasting for the next month was achieved.

#### TECHNICAL SKILLS

**Programming Languages:** C/C++, Python, Java, Go, php, JavaScript, TypeScript

Tools and Libraries: OpenCV, Tensorflow, Keras, NLTK, sklearn, Flask, MySQL, MongoDB

Git, Sqlalchemy, Marshmallow, React, LaTeX, Unity

#### RELEVANT COURSES

Modern Cryptology Applied Machine learning Data Structures and Algorithms Principles of Database Systems Probability and Statistics Linear Algebra Introduction to C Time Series Analysis Abstract Algebra

Introduction to Microeconomics Logic and Set Theory Numerical Analysis and Computing

### LEADERSHIP INITIATIVES

• Elected among 6 Senators, who represent Y17 batch of 900 students in the Students Senate, IIT Kanpur.