# Rajat Garg

Computer Science & Engineering (B. Tech) Indian Institute of Technology, Kharagpur

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## **EDUCATION**

#### **IIT Kharagpur**

B.Tech in Computer Science 2018 | Kharagpur, West Bengal

## **PROFILES**

Github://rajatgarg149 LinkedIn://rajat-garg-2212a5a1 HackerRank://rajatgarg149

## COURSEWORK

Deep Learning Artificial Intelligence **Image Processing** Machine Learning Operating Systems Networks Regression & Time Series Software Engineering Probability & Statistics Linear Algebra Algorithms Programming and Data Structures

## **CERTIFICATES**

#### Coursera

Machine Learning, Stanford Online

License: KFZKX48CSCWN

Data Science Python, Michigan (Spec.)

License: LM74P8XQFHUA Deep Learning, deeplearning.ai License: ZGDSA4CZ8ZZG Big Data Essentials, Yandex License: 4UTZMTVLVY2Z

## **SKILLS**

#### **Programming**

- Python Java C C++
- R Scala Octave/MATLAB
- HTML CSS SQL

#### Framework

- Tensorflow Keras
- Hadoop Spark

#### Library

- sklearn Gensim NLTK
- netkworkX matplotlib

## **FXPFRIFNCF**

#### Quantinsti | RESEARCHER

May 2018 - Jul 2018 | Dec 2016 - Jan 2017 | Mumbai, India

- Design, develop and deploy an automated optimised technical pattern search 'charting' on stock data, flexible to update patterns and evaluates market.
- Documented and tested a well-built trading platform Quantra Blueshift.
- Stock Prediction using Recurrent Reinforcement Learning. Sharpe's ratio as reward function, M-previous returns as policy and trader function as action.

## Samsung R & D, Bangalore | SUMMER TRAINEE

May 2017 - July 2017 | Bangalore, India

- Developed computational models for blood glucose monitoring through the Near Infrared (NIR) Spectroscopy, proving feasible non-invasive techniques.
- Multi-wavelength reflectance spectra were processed for computation.

## **PROJECTS**

#### Company Network Prediction | Social Network Analysis

Jul 2018 - Sep 2018 | Prof. Daniel Romero

- Company email network mapped on networkx used to categorize department and management position salary and predicting future connections.
- Features created using scores for different graph algorithms like PageRank, etc.

#### Paraphrase Similarity Check | Applied Text Mining

Aug 2018 - Oct 2018 | Prof. V. G. Vinod

- Built paraphrase quality predictor with document path similarity method.
- Calculated the topic distribution for new document using a modelled corpus.

#### Deep Neural Network | DEEP LEARNING

May 2018 - Aug 2018 | Mr. Andrew Ng

- Built a L-layer deep neural network model from scratch with back-propagation.
- Tested the model on a image classification dataset with varying layers.

#### Interactive Custom Visualization | Applied Plotting

Sep 2018 - Dec 2018 | Prof. Christopher Brooks

- Built a custom visualization implementing bar coloring and adding onclick events interactivity for user threshold selection.
- Created subplots with shared axis to visualize multi-scaled Ann Arbor statistics.

# Recommendation of Wiki Pages | AUTOMATED WEB SCRAPING

May 2016 - June 2016 | Prof. Pawan Goyal

- Programmed an automated script which text mines the wikipages within the same category of given links and stores the tagwise processed information.
- Built parallel functioning operations using Apache Spark on top of the script performing text-search, word frequency count and similarity valuation.

## **ACHIEVEMENTS**

2014 290<sup>th</sup> rank

JEE-Advance (Out of 150,000 students) 2010 Represented Madhya Pradesh School Games Federation of India (Chess)