# Rajat Garg

Computer Science & Engineering (B. Tech), IIT Kharagpur rajatgarg149@gmail.com | 9039495856 rajatgarg149.github.io

# **EDUCATION**

#### **IIT Kharagpur**

B.TECH IN COMPUTER SCIENCE 2018 | Kharagpur, West Bengal

#### Barfani Academy

10+2 HIGHER SECONDARY SCHOOL Indore, Madhya Pradesh

#### **Gujarati Samaj School**

HIGHER SECONDARY SCHOOL Indore, Madhya Pradesh

#### **PROFILES**

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

# **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, Andrew Ng License: KFZKX48CSCWN

Data Science Python, Michigan (Spec.)

License: LM74P8XQFHUA
Neural Networks & Deep Learning
License: ZGDSA4CZ8ZZG

# **SKILLS**

## **Programming**

Python • Java • C C++ • R HTML • CSS MySQL • Scala

#### **FrameWeork**

Apache Spark Django

#### **FXPFRIFNCF**

# Quantinsti | Content Developer & Researcher

May 2018 - Jul 2018 | Dec 2017 - Jan 2018 | 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.
- Modelled corpus into a distribution of different topics, where a topic is a distribution over words.

#### Wikipedia Dump Processing | Big Data Essentials

Dec 2018 - Present | Mr. Alexey A. Dral

- Word count program to process Wikipedia dump using MapReduce.
- Most occurred collocations listed using npmi on bigrams in Wikipedia dump.

#### 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.

# **AWARDS**

| 2018 | Special Mention            | Radha Krishnan Hall of Residence        |
|------|----------------------------|---|
| 2017 | Best Unrated               | All India Chess Federation- Open Rating |
| 2014 | 290 <sup>th</sup> /1.5 lac | JEE-Advance                             |
| 2010 | Represented Madhya Pradesh | School Games Federation of India        |