https://github.com/kiranrawat

### **WORK EXPERIENCE**

### SSR Mining Inc.

### **Data Science Co-op**

May 2019 - Feb 2020

♥ Vancouver, Canada

#### Gold Prediction for Marigold Mine Site Using Machine Learning

- Collected and processed mining exploration data Spark, S3, EC2
- Performed oversampling using SMOTE(Synthetic Minority Oversampling Technique).
- Developed decision tree and deep learning classifiers to predict the gold distribution at SSR's Gold mine site. - XGboost, LightGBM, CatBoost, Random Forest, SVM, H2O, MultiLayerPerceptron.

### Simon Fraser University

### Teaching Assistant, CMPT 225 - Data Structures and Programming

₩ Sep 2019 - Dec 2019

Burnaby, Canada

• Provided assistance with assignments to 111 undergraduate students.

### INFOSYS LTD.

### Senior Systems Engineer, Technology Information Risk (TIR)

- Chandigarh,India
- Worked on various UI modules written in AngularJS and designed intuitive and useful interfaces based on client demands.
- Gathered requirements from the client on a daily basis and developed high-level diagrams and designs to incorporate new features in existing application.
- Followed agile methodology for development and testing process.
- Skills MySQL, Typescript, Java, HTML5, JQuery, CSS, Spring MVC.

### Systems Engineer, iCloudPM and iTrac Application

## Feb 2015 - Aug 2016

Chandigarh,India

 Worked as the sole programmer on this project, handled requirement gathering, designing, coding and releasing timely deliverables on the production environment. Skills - PHP, jQuery, AJAX, JavaScript, HTML, CSS, MySQL, SVN, JSON.

## **PROJECTS**

## Understanding Global Poverty Using Visualization, Simon Fraser University

- Skills Used: D3.js, React
- Developed a visualization dashboard by utilizing visualization principles to understand the global poverty and various factors related to it.

## Predicting Stable Portfolios using Machine Learning and Deep Learning, Simon Fraser University

- Skills Used: Keras, NLTK, Scikit-learn, Pandas, NumPy
- Analyzed effect of sentiments of SEC filings on stock prices of S&P500 companies and predicted a stable portfolio based on sentiment scores and OHLC data using neural networks.

#### **NYC Taxi Analysis, Simon Fraser University**

• Performed ETL using PySpark and analyzed the dataset to provide the insights on how the taxi vendors in NYC can improve their business. Visualized the results using Kibana framework.

### Ratatouille At Your Service, Simon Fraser University

- Skills Used: PyTorch, NumPy
- Re-implemented state-of-the-art neural joint embedding model that was developed in the research paper published in 2018.

## **BLOG POSTS**

- Apr 14, 2019 Predicting Stable Portfolios Using Machine Learning
- Mar 08, 2019 Deep Learning using BigDL

## **EDUCATION**

## MSC in Computer Science (Big Data) Simon Fraser University (GPA 3.85)

 Key Subjects: Machine Learning, Statistical Learning and Prediction, Programming in Big Data, Visualization

## Bachelor of Technology Uttarakhand Technical University (80%)

 Key Subjects: Data Mining, Data Structures, Database Management Systems, Design and Analysis of Algorithms

## Diploma in Computer Science Government Polytechnic Srinagar (77%)

## TECHNICAL SKILLS

- ML Libraries: Pytorch, Keras, TensorFlow, Scikit Learn, Pandas, NumPy, H2O, XGboost, CatBoost, LightGBM, SVM
- Languages: Python, R, Java, PHP, Angular, Bash Scripting, JavaScript, SQL
- Frameworks: Apache Spark, Anaconda/Spyder, Maven, Spring
- Development and Deployment Tools: Openshift, Docker, Kubernetes, Git, JIRA, Jupyter, VS Code, RStudio
- Databases: NoSQL Cassandra, MySQL, Oracle 10g
- Hadoop Ecosystems: HDFS, Kafka, Map Reduce, Hadoop Streaming
- Cloud Computing Services: AWS, GCP
- Visualization Tools and Libraries: Tableau, Kibana, D3.js, Matplotlib, Plotly, Seaborn

# **ACHIEVEMENTS & AWARDS**

- Co-op work was recognized and published in quarterly newsletter of SSR Mining Inc.
- Received certificate of participation for attending the ACM Main and ACM-W Events 2013.
- Awarded with Infosys star award in recognition of outstanding achievement for consistent performance and sheer commitment towards work.