Amar Sahota

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Amar Sahota has been able to develop specialized skills in R, Python, SQL, Excel and other programming languages allowing him to solve complex problems, while generating and displaying significant insights from large data sets. He is a highly motivated, result-oriented professional who has proven his ability to juggle multiple priorities simultaneously. His objective is to obtain a position that will allow him to use his problem-solving and programming skills in the field of machine learning and mathematical finance to create quantitative models to aid decision-making.

SKILLS

Python	Data Visualization	Communication
R	Data Analysis	Problem-Solving
SQL	Tableau	Organization
Machine Learning	Excel	Mathematics
Quantitative Modelling	Time Management	Statistics

PROJECT AND WORK EXPERIENCE

Lantern Institute
Mathematical Finance and Data Science   **March 2019 – Present**
- Preformed Data analysis on Samsung health data to investigate patterns and to generate significant insights using Python (**Numpy, Pandas, Matplotlib, Seaborn, Scikit Learn**). Created apps displaying insights and interactive visuals using flask and dash. Deployed apps on cloud server.
- Used unsupervised and supervised **machine learning** techniques such as **PCA**, **K-Nearest Neighbors**, **K-Clusters** and **Regression** to create predictions and analyse structure of data.
- Investigated LIBOR interests' rates for multiple **CAD** and **USD** tenors. Analysed the variance of tenors using **principal component analysi**s and investigated correlation plots to generate key insights. Used predictive models such as autocorrelation and Vasicek models to project probability distributions for future rates.
- Set-up queries for **SQL** databases to sort, aggregate, join and analyse data to generate insights.

Equity Options Trader   **April 2017- Present**
- Traded option contracts on **stocks**, **ETF's** and **indexes**
- Analyzed Markets based on **Fundamental** and **Technical** Analysis
- Consulted with investors to find optimal strategies for specific market conditions
- Used **R programming** to back test and analyze different strategies
- Used **Pandas** in **Python** to track results and analyze trading data
- Altered and Adjusted positions based on market fluctuations
- Hedged stock positions using options contracts

Designtest & Balance
Project Manager Assistant   **January 2014- August 2015**
- Created an automated data entry process for air and water reports using **Excel**
- Prepared blueprints and reports prior to onsite visits
- Attended meetings to go over the deficiencies and the progress of ongoing projects
- Worked directly with the project manager to create and schedule jobs

EDUCATION

Society of Actuaries   **January 2019**
Exam P

Ryerson University   **April 2018**
Mechatronics Engineering