Sourav Biswas

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Experience

BMO Capital Markets – *Quantitative Analyst*

Toronto, Ontario - Apr 2018 – Aug 2018

- Yielded a credit positive for BMO by developing the blockchain platform used in the first ever blockchain bond issuance in Canada
- Built machine learning models to predict demand for US treasury bonds with Python & Scikit-Learn
- Created VueJS data visualization models for institutional clients to analyze the Canadian bond market
- Implemented bond analytics tools using real time data from internal web sockets
- Reduced loading times by 97% by improving web socket infrastructure & simplifying network calls
- Automated emails using C# scripts and job schedulers, saving hours of manual work

Sir John A. Macdonald S.S. – Computer Science Instructor

Waterloo, Ontario - Jun 2016 - Jun 2017

- Improved class attendance by 40% (50 to 70 students) through restructuring curriculum
- Designed and delivered weekly lessons on programming languages and computer science concepts

Projects

SumNotes Sep 2017

- Created a web app that autonomously takes summarized notes in lectures or meetings
- Won Hack the North 2017 Best Use of Cockroach Database
- Implemented a user login system with SQL

BlockChainge

Jun 2018

- Built a full stack decentralized fundraising platform on Ethereum for donations & crowdsourcing
- Reduced donation fees by 99% compared to traditional platforms
- Implemented a tier based payout system & document upload with IPFS to increase transparency

Algorithmic Trading

Jul 2017

- Developed a machine learning stock trading algorithm with a Decision Tree classifier
- Predicted stock price movements with 75% accuracy
- Accessed stock data using the Google Finance API & Pandas

NBA Predictive Analytics

Dec 2017

- Created a data visualization tool to help coaches detect areas of the court to prioritize defense
- Simulated players' shooting with machine learning using K-Nearest Neighbours
- Analyzed NBA players' gameplay by data mining shooting data

Education

University of Waterloo

(Expected) 2017 – 2022

Bachelors of Computer Science - Software Engineering Option

Cumulative GPA – 4.0/4.0 (Dean's Honours List – 2017 & 2018)

Wilfrid Laurier University

(Expected) 2017 – 2022

Bachelors of Business Administration - Finance Concentration

Cumulative GPA – 4.0/4.0 (Dean's Honours List – 2017 & 2018)

Skills

Python, Java, C, C++, C#, HTML/CSS, JavaScript (Node, iQuery, Vue, React), Git, Linux, Scheme, SQL, Android, Firebase, Scikit-Learn, Pandas, Matplotlib, Jupyter Notebook

Awards

- Schulich Leader Scholarship Offered \$80 000 by Western University for STEM leadership
- René Descartes National Scholarship Awarded \$25 000 by University of Waterloo for math merit
- Governor General's Academic Medal Ranked 1st out of 250 students in academic standing
- ECOO Programming Provincial Finals Placed 9th out of 400+ teams across Ontario
- Galois Math Contest Ranked top 0.5% in the world