

Sourav Biswas

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EXPERIENCE

Uber Advanced Technologies Group

Jan 2020 - Jun 2020

Research Intern

Toronto, ON

- Advisor: Professor Raquel Urtasun 🐙, Direct Supervisor: Shenlong Wang 🐙
- Researched novel machine learning algorithms for self-driving vehicles
- Developed deep learning models with Pytorch / C++ and created visualizations with Open3D

University of Waterloo

Sep 2019 - Present

Research Assistant

Waterloo, ON

- Advisor: Gautam Kamath 🐙
- Implemented practical differential privacy algorithms for statistical estimation

Wilfrid Laurier University

Sep 2019 - Dec 2019

Research Assistant

Waterloo, ON

- Created R scripts analyzing fixed income securities for a graduate level financial analytics course

Wish

Jan 2019 - Apr 2019

Software Engineer Intern

San Francisco, CA

- Saved \$2 million/year by enhancing order refund tools to prevent incorrect refunds
- Lowered repeat customer support cases 27% by improving server logic, cutting support costs
- Reduced audit times over 67% by enhancing web based internal tools to support hotkeys

BMO Capital Markets

Apr 2018 - Aug 2018

Quantitative Analyst

Toronto, ON

- Generated a Moody's credit positive for BMO by developing the blockchain infrastructure used in the first blockchain bond issuance in Canada – featured on Bloomberg, CoinDesk & Financial Post
- 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
- Reduced loading times by 97% by improving web socket infrastructure & simplifying network calls

EDUCATION

University of Waterloo

Sep 2017 - Aug 2022

Bachelor Computer Science (Combinatorics & Optimization Minor) - GPA: 91/100

Waterloo, ON

Wilfrid Laurier University

Sep 2017 - Aug 2022

Bachelor of Business Administration (Finance Major) - GPA: 91/100

Waterloo, ON

PROJECTS

Computer Vision Weightlifting Coach: Implemented a tool to analyze videos & detect unsafe posture with OpenCV

SumNotes: Won Hack the North 2017, Best Use of Cockroach DB (\$1000 Prize) - converts audio into summarized notes

NBA Predictive Analytics: Created a visualization & prediction tool for coaches to detect court areas to prioritize

SKILLS

Python, Java, C, C++, C#, HTML/CSS, JavaScript (Node, jQuery, Vue, React), Git, Linux, Scheme, SQL, MongoDB, Numpy, Scikit-Learn, Pytorch, Pandas, Open3D, OpenCV, Matplotlib, R, Jupyter, Latex, Bloomberg

AWARDS

Schulich Leader Scholarship: \$80 000 value from Western University (top science applicant) - declined offer

René Descartes National Scholarship: \$25 000 value from University of Waterloo (top 10 in Canada)

Governor General's Academic Medal: Ranked 1st out of 250 students in high school graduating class

ECOO Programming Provincial Finalist: Placed top 10 out of 400+ teams across Ontario (top 2%)

Galois Math Contest: Ranked top 30 out of 7000+ contestants (top 0.5% worldwide)