Maanav Garg

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Toronto, Ontario

Personal Website: <u>maanavgarg.com</u> LinkedIn: <u>linkedin.com/in/maanavgarg</u> Github: <u>github.com/Maanav-G</u>

Education

McMaster University

Hamilton, Ontario

B.A.Sc. Honours Computer Science - GPA: 3.94/4.0

Expected April 2022

Work Experience

Microsoft Seattle, Washington

Software Engineer Intern

May 2020 - August 2020

- Developed an interactive telemetry based dashboard using C# with ASP.NET and JavaScript for Visual Studio's extension ecosystem.
- Leveraged **Kusto** and **SQL** for extracting and engineering data by translating extension telemetry into digestible information and processing that data into an **Azure SQL Database** using an **Azure WebJob** that runs periodically (1 hour) to append all new data.
- Designed and implemented over 15 different components for the dashboard's UI using ReactJS and TypeScript.
- Implemented security protocols to protect the dashboard's server and end-users from malicious activities using Azure KeyVault and Application Gateway.

Deloitte Toronto, Ontario

Consulting Analyst

January 2020 - April 2020

- Consulted client-side for a large aviation conglomerate on a 'Loyalty Rewards' program that was delivered ~2 sprints earlier than projected.
- Acted as the primary functional analyst for our feature team, where I was the liaison between the client and vendors for all technical and business processes.
- Solely delivered 4 major functional features that entailed managing the vendors, ensuring deadlines were met, and requirements were signed-off on.
- Managed and ensured accuracy on the Confluence and JIRA platforms by assuring all on-going changes were appropriately reflected.

IBM Markham, Ontario

Software Engineer Intern (16-months)

May 2018 - August 2019

- Supported client-side development for TD, National Bank, HSBC, and Desjardins by working on 8 distinct projects, primarily using Java and Python.
- Designed and developed a fully functioning **REST API** using **Python** that stored the required order data based on the transaction ID in an **IBM Cloudant Database** by connecting to the Thompson Reuter servers via **HTTP**.
- Increased TD's orders-processed per second by ~100% (600,000), by implementing a redesign to their stock order engine using Java.
- Streamlined an internal unit-testing process by 20% (4hr) by creating a Python script that automates test-case construction using an IBM Db2 Database.

McMaster University - Faculty of Computing & Software

Hamilton, Ontario

Research Assistant

January 2019 - April 2019

• Implemented Elm and Haskell to support Dr. Christopher Anand's current research on Computational Algebraic Thinking.

Extra-Curricular Involvement

DeltaHacks - Faculty of Engineering, McMaster University

Hamilton, Ontario

Vice President, Finance and Sponsorship

May 2019 - Present

• Directed a cross-functional executive team to obtain funding from 22 corporate sponsors of \$105,000, yielding a year-over-year 31% increase in funds, 25% surge in company interest, 12% improvement in sponsor retention and a 10% negotiated increase in initially proposed funding.

Mathematical Investment Research Council

Hamilton, Ontario

Quantitative Research Analyst

September 2019 - April 2020

• Designed quantitative trading strategies to predict the stock market by using **Python** to build mathematical models of **neural networks (NNs)** and **support vector machines (SVMs)** via **ensemble learning**.

Technical Experience

 ${\it Experience working with Python, Java, C\#, JavaScript, SQL, Kusto (KQL), HTML/CSS, Haskell and Elmonton a$

Tools and Technologies: MongoDB, Git, Azure, AWS, IBM Cloud, Flask, ReactJS and .Net

Wallet - Financial Budgeting Application

maanavgarg.com/wallet/wallet-app

• A REST API for a personal finance dashboard created using Plaid's API that displays your aggregated accounts and transactions.

Questrade API Wrapper

github.com/Maanav-G/questrade-api-wrapper

• A custom **Python** wrapper for the Questrade API that retrieves and analyzes key information from my Questrade Trading account.

NBA Rookie Statistics Predictor

github.com/Maanav-G/NBA-rookie-statistics-analysis

• A machine learning model designed in Python that predicts the statistics of the NBA's 2019-2020 season rookies.

Additional Information

Additional Campus Involvement: EDGE: Technology Lead, Microsoft: Student Partner and Waterloop: Software Developer

Competitions and Conferences: Placed 1st in Deloitte's Consulting Case Competition, 2nd in Microsoft's Azure Competition, 1st in IBM's FutureBlue Competition, 3rd in Deloitte's Blockchain Case Competition, 2nd in Microsoft's Machine Learning Competition and 5th at HackPrinceton for best overall 'Hack'