Bobby Yang

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EDUCATION

McGill University - School of Computer Science *Graduated. 2018*

- Bachelor of Arts, Computer Science
- Bachelor of Arts, Economics

Computer Skills: Java, JavaScript, C, Python. *GitHub:* https://github.com/jbby

EXPERIENCE

PTC **Montreal, QC**

Software Developer *June 2018 – Present*

- Built product lifecycle management software and IoT applications that connected over 100,000 products to the cloud.
- Constructed robust software applications and wrote documentations used by over thousands of engineers.

McGill HackBoard Montreal, QC

Financial Director *May 2017 – April 2018*

- Planned McHacks, Montreal's largest and well-known hackathon that is attended by hundreds of students from all over the East coast.
- Maintained the ledger, processed financial transactions, and reached out to corporations for sponsorships.

Arvato Systems Shanghai, China

Software Engineering Intern *May 2016 – July 2016*

- Helped develop enterprise software for large scale systems using Java EE's Spring Framework and Apache Maven and Git for project management.
- Implemented a fully distributed inter-process communication system using locks to prevent race conditions and ensure synchronization to properly update data across multiple servers.

Computer Science Undergraduate Society Montreal, QC

Programming Tutor *September 2014 – April 2018*

- Responsible for helping students with debugging and troubleshooting algorithms in Java and C.
- Explained various abstract data types such as Linked Lists, Graphs, Trees, and showed examples through pseudocode.

PROJECTS

Quantitative Analysis Algorithm (Python)

- Developed a mean-reversion algorithm using Quantopian's API to analyze over 14 years of US equities data and back test against it.
- Optimized the trading algorithm to buy and sell securities on the stock market to generate profit, with necessary algorithmic adjustments to ensure maximized profits with minimal losses.

Text Generating Recurrent Neural Network (Python)

- Incorporated Python's Keras machine learning library to construct a LSTM recurrent neural net that generated fully readable Montreal Blog article titles.
- Enrolled human participants for adjusting input data processing and neural network structure to reduce overfitting and underfitting of generated text.

Discord Interactive Server Bot (Python)

- Engineered a responsive bot that leveraged Discord's API to communicate with the server and process user commands.
- Supported web scraping McGill's course website to generate course description, manipulating image macros for users' entertainment and creating weather reports via OpenWeatherMap.org.

Tibia MMORPG Guidance System (Java)

- Implemented a messaging system in Java to communicate directly with the game client due to a lack of initial software support.
- Simulated Tibia's in-game map as a weighted graph and then traversed the map using Dijkstra's shortest path algorithm to automate and quicken travel times.