

Bobby Yang

fan.yang7@mail.mcgill.ca | (909)-263-8480 | Montreal, QC

EDUCATION

McGill University

Expected May 2018

- Bachelor of Arts, Computer Science & Economics

Language Skills: Java, Python, JavaScript, MEAN, C

GitHub: <https://github.com/jbby>

EXPERIENCE

McHacks Board of Directors

Montreal, QC

Financial Director

May 2017 – Present

- Planned McHacks, Montreal's largest and most 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 – Present

- Responsible for helping students with debugging and troubleshooting complex algorithms in Java and C.
- Held tutorial sessions that composed of explaining various abstract data types such as Linked Lists, Graphs, Trees, and prepared 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.