Matthew Webster

(289)-937-1711 ❖mat.webster@mail.utoronto.ca❖ www.linkedin.com/in/matthewwebster314/

Education

UNIVERSITY OF TORONTO
Honours Bachelor of Science, Computer Science and Mathematics ❖ Currently Enrolled (Year 3) ❖ GPA: 3.5/4.0

- Seeking to specialize in **AI,** Mathematical Finance and overall software development.
- ***Course Highlights:*** Real Analysis, Multivariable Calc, Numerical Methods, Intro to Databases, Intro to Artificial Intelligence, Algorithm Design and Analysis, Intro to Software Design, Linear Algebra I & II, Intro to Financial Accounting, Advanced Probability and Statistics, and Ordinary Differential Equations.

Experience and Projects

UofT's Quantitative Finance Club, Vice President, 2017 to Present

Vice President and Pioneer of UofT's first Quantitative Finance Club. *What I do:*

- Lecture information sessions. Facilitate strategy sharing sessions. Book keeping.
- Host Finance/Machine Learning/Data Science Workshops
- Currently in process of creating in-school trading competitions, and networking events.

ADX-based Trading Algorithm (Completed):

- *The goal: to make a trading algorithm that utilizes entry decisions based on the ADX indicator to ride trends. Then to test this algorithm from 2018.05.13 – 2019.06.13 (1 year and a month).*
- What was done: Algorithm includes volatility-based stops and take profits (based off ATR(20)). It is interactive as the user can choose how much of their account they want to risk at a time (for testing, the total risk was 15%) and their lot size will be generated based on that risk and the current account balance. The testing account starts at $10,000 USD. Tested on three currency pairs: CAD/CHF, USD/CAD, GBP/CAD.
- Results: Mean Return: 52.51%, Largest Return: 100.22%, Average Absolute Drawdown: $1688.77, Average Expected Payoff: 11.27.

Volatility Suppressor (In-Progress):

- *The goal: to make a trading algorithm that through a self-made probabilistic model, can produce consistent profit in a volatile currency market.*
- Completed: Scraped the web for the data. Clean the data. Done non-linear regression analysis. Self-made Mathematical method.
- To-Do: Use C to make an Electronic Advisor program to manipulate the analysis to do trades. Testing.
- Technical Skills & Languages: C, Python, Web Scraping, Interest Theory, Three-Factor Model.

Technology Summary

- ***Programming/Languages (in order of strength):*** Python, MQL4 language, Java, C, C++, HTML5, CSS3, JavaScript.
- ***Design & IDE Tools:*** Microsoft Visual Studio, eclipse, IDLE, Wing, DreamWeaver, UML, Git.