

RAFAY MALIK

(519) 990-8496 | r22malik@uwaterloo.ca | <http://rafaymalik.github.io>

EDUCATION

University of Waterloo

September 2015 - April 2020

· Bachelor of Mathematics, Math/Financial Analysis & Risk Mgmt, CFA Specialization, Honours, Co-op

SKILLS

Programming

XAML (WPF), VBA, SAS, Python (NumPy, pandas, Dash, matplotlib, Bokeh, sklearn, plotly, kivy), VB.NET, SQL, Scheme, R, Matlab

Tools

HTML/CSS, Microsoft Office (SharePoint, Excel, Access)

EXPERIENCE

TD Securities

September 2019 - December 2019

Associate Intern, Equity Trading

Toronto, ON

- Independently initiated and built interactive data visualization/analysis tool using Python (plotly, Dash, pyodbc, pandas) to highlight trading data including algorithm performance, volume/value analysis among other meaningful metrics for strategic decision-making
- Successfully built Python script to simulate foreign exchange exposure scenarios for hedging analysis, yielding insights on which exposure limits offer increased profitability and decreased volatility
- Developed Python script (pywinauto) to communicate with various desktop applications and automate daily reporting procedures with bindings to VBA Macros/Excel and internal order routing system
- Independently built numerous VBA macros and python scripts, majority self-initiated, to streamline processes and automate repetitive tasks including e-mail/web scraping, SQL bindings and invoice templating

Milliman

January 2019 - April 2019

Intern, Life Mergers & Acquisitions

Chicago, IL

- Leveraged SAS to consolidate and manipulate life insurance data used for stochastic modelling
- Independently developed numerous VBA macros including tool to auto-generate SAS code required to read in raw datasets, handling datatypes and dynamic variable-naming, reducing time required by ~ 99%
- Aided in web development of RShiny data visualization application

City of Hamilton

May 2018 - August 2018

Data Analyst

Hamilton, ON

- Individually developed two elaborate Python desktop applications from scratch (kivy, numpy, matplotlib, pandas, Bokeh) for traffic data analysis, visualisation and reporting on own initiative
- Created multi-purpose request tracking tool to streamline work requests within Traffic Department using UserForms/VBA in Excel to encourage workflow optimization

ArcelorMittal

September 2017 - December 2017

Business Analyst

Hamilton, ON

- Built numerous macros bound to internal databases to enable automation of manual data entry, improving time efficiency for daily tasks by over 95%
- Developed VBA script to track accuracy and precision metrics based on projected and production operation schedules, yielding key efficiency and optimization insights for strategic decision-making

Health Canada

January 2017 - April 2017

Junior Business Analyst

Ottawa, ON

- Assisted in building WPF application (.NET stack/XAML,VB.NET) for elaborate MS Word Add-in
- Successfully built locally-hosted website which included training materials and team information

INTERESTS

- Mathematics, Poker, Travelling