RAFAY MALIK

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EDUCATION

University of Waterloo *September 2015 - April 2020*
· Candidate for Bachelor of Mathematics, Financial Analysis & Risk Management
President's Scholarship of Distinction
· Awarded for applying with a 95+ entrance average

EXPERIENCE

TD Securities September 2019 - December 2019
Associate, 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 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 serving various functions, many self-initiated, to streamline processes and automate repetitive tasks including e-mail scraping, web-scraping, SQL bindings and invoice templating
· Optimized VBA code for trade ticketing procedures, cutting run-time for rigorous tasks by as much as 99%

Milliman January 2019 - April 2019
Intern, Life Mergers & Acquisitions *Chicago, IL*

· Leveraged SAS to consolidate and manipulate life insurance data used for stochastic modelling to value life insurance policies
· Independently developed VBA Macro to auto-generate SAS code required to read-in raw data-sets, handling data-types and dynamic variable-naming, reducing time required by as much as 99%
· Aided in web development of RShiny data visualization application, implementing dynamic functionality for UX enhancement
· Built numerous VBA Macros and custom Excel functions to automate repetitive tasks for validation reporting and hedging cash flow analysis

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

SKILLS

Programming	XAML (WPF), VBA, SAS, Python (NumPy, pandas, Dash, matplotlib, Bokeh sklearn), VB.NET, SQL, Scheme, R, Matlab
Tools	HTML/CSS, Microsoft Office (SharePoint, Excel, Access)

INTERESTS

· Mathematics, Poker, Travelling