Matthew Connell-Tombs

PROFILE

A highly motivated mathematics graduate possessing strong analytical and communication skills, and the ability to clearly explain complex concepts. My other skills and abilities include:

- Knowledge of programming and machine learning concepts and their application in Python, R, SQL, and SAS
- Proven proficiency in Microsoft applications, with advanced knowledge of Excel, including VBA coding, data management, information extraction and visualizations tools
- Proven ability to learn quickly and adapt to dynamic environments and projects
- Strong time management skills with the ability to manage multiple assignments and deadlines while maintaining an excellent quality of work

EDUCATION

Bachelor of Mathematics
Major in Statistics, Minor in Actuarial Sciences
University of Waterloo   September 2018 – June 2023

Relevant Courses Include:

- Statistical Learning - Advanced Regression
- Computational Statistics and Data Analysis
- Generalized Linear Models and their Applications
- Computer Applications in Business: Databases
- Algorithmic Problem Solving
- Mathematical Statistics
- Applied Probability

WORK EXPERIENCE

Data Analyst Co-op
Samos   September 2022 – December 2022
- Created a Natural Language Processor (NLP) in Python to categorize user-inputted text into categories of medical procedures
- Conducted web scraping to collect and compile data from multiple websites to create a dataset for training and testing models
- Presented findings and recommendations from NLP model building to stakeholders

Data Science Co-op
Aviva Canada Inc.   January 2022 – April 2022
- Aided team in designing, testing, and documenting a commercial general liability model
- Created an app in Python to allow users to compare policy premiums under the current algorithm and a selected model algorithm
- Updated visual tools in Python to allow for easier comparison of premium models

Actuarial Analyst Co-op
Allstate Insurance Company of Canada   May 2021 – August 2021
- Led analysis, compiling and filing of an automobile endorsement rate change
- Aided in DCPD rate change filings for miscellaneous lines by writing SAS code to analyse premium impact, calculating offset factors and completing filing documents
- Updated and ran monthly and quarterly Extension of Exposure programs using SAS

Actuarial Business Co-op

Swiss Reinsurance   September 2020 – December 2020

- Investigated and reported the impacts of IFRS 17 on current and future reporting requirements
- Reviewed P&C reinsurance treaties to ensure smooth transition in adopting IFRS 17
- Created and presented presentations summarizing key impact points of IFRS 17 and needed changes moving forward

Actuarial Analyst Co-op

Royal & Sun Alliance Insurance Company of Canada   January 2020 – April 2020

- Developed and improved existing analytical tools such as rate calculators to allow for easier checking of policies and updating of files
- Wrote SAS code to identify potential errors and investigated inconsistencies in data tables
- Aided in the compiling and filing of multiple automobile rate change requests

Financial Risk Analysis & Risk Analysis Co-op

Office of the Superintendent of Financial Institutions   May 2019 – August 2019

- Performed data analysis on macro stress test data designed to uncover patterns and exceptions across financial institutions
- Migrated data across systems and automated verification of data integrity using VBA
- Prepared recommendation reports that summarized functional testing results and detailed areas for improvements in efficiency

VOLUNTEER EXPERIENCE

Excel Tutor

CAUSE Tutoring   April 2021 – November 2021

- Provided one-on-one, personalized tutoring through a charity that aims to eliminate barriers to education for vulnerable members of the community
- Created weekly lesson plans and practice problems on Excel to help my student achieve their educational and career goals

Head of Finance and Registration

Sacred Heart CHS - Relay For Life   September 2017 – June 2018

- Led a team of four committee members to ensure the funds raised, and the disbursements made, were accurately recorded and completed in a timely manner
- Developed an efficient system and workflow, including various spreadsheets, to manage the registration of over 1,000 participants, and the intake of over $200,000 of donations
- Reviewed and verified bank deposits and bank reconciliations

ACTIVITIES & INTERESTS

Independent Coding Projects (e.g. video game development, data scraping)   2018 - Present
Pole Vaulter, Bolton Pole Vaulting Club   September 2015 - July 2018
Team Member, American Regions Mathematics Competitions   February 2017 – May 2017
Student, Fields Institute - Math Circles   March 2016 – June 2017
"Crunching the Numbers: Global Finance" Student, Duke University TIP   July 2016
Student, Brock University Summer Math Camp   August 2013, 2014, 2015