# **Matthew Connell-Tombs**

## SUMMARY OF SKILLS

- Knowledge of programming and machine learning concepts and their application in Python (numpy, pandas, scikit-learn, XGBoost), 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

### WORK EXPERIENCE

#### **Statistical Services Analyst**

Canadian Life and Health Insurance Association – Toronto, ON

September 2023 – Present

- Aiding in the maintenance and development of a SQL database, ensuring data integrity and troubleshooting data quality issues
- Managing industry surveys and enhanced analytical solutions to support policy objectives
- Creating visualizations and dashboards to effectively communicate statistical results and highlight industry trends

## **Data Analyst Co-op**

Samos – Waterloo, ON

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. – Markham, ON

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 – Markham, ON

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 - Toronto, ON

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 – Toronto, ON 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 – Toronto, ON 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

#### **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

#### **ACTIVITIES & INTERESTS**

**Independent Coding Projects** 

2018 - Present

- Image Detection Models
- Clustering Models
- Regression Models
- Data Scraping
- Video Game Development

Long Distance Runner

Pole Vaulter, Bolton Pole Vaulting Club

July 2023 – Present September 2015 – July 2018