## Ali Raisolsadat (MMATH, BSc)

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### **SUMMARY OF QUALIFICATIONS**

- Demonstrated exceptional 2+ years of research experience across projects in financial modeling, statistical analysis, and insight extraction, showcasing expertise in developing and executing innovative data-driven methodologies.
- Strong quantitative background with a Master of Mathematics in Computational Mathematics (90%) from the University of Waterloo and dual BScs in Financial Mathematics (85%) and Actuarial Science (95%) from the University of Prince Edward Island.
- Proficient in R (4+ years) and Python (2+ years) for data analysis, modeling, and visualization.
- Experienced with MS Office Suite, SQL (PostgreSQL, ETL) and Java for backend development and data processing.

#### PROFESSIONAL EXPERIENCE

# Canadian Centre for Climate Change and Adaptation - Charlottetown, PEI

Summer 2021, 2022, 2024

Data Scientist

- Spearheaded a research project with the climate policy team to quantify international cooperation among G7 nations using the United Nations Sustainable Development Goals (SDG) data.
- Constructed ML algorithms such as LASSO, Ridge regression, and PCA for data analysis and feature extraction.
- Presented findings at the 25<sup>th</sup> IME Conference 2022 and published this research in the prestigious Nature Communications journal<sup>1</sup>.

#### Veterans Affairs Canada - Charlottetown, PEI

May 2020 – September 2020

Research Assistant

- Led a longitudinal study forecasting insurance reimbursements for veterans' medications using ARIMA, AR, MA and regression time series models in R (Tidyverse, lubridate), to produce a 5-year forecast with a 95% confidence interval, revealing critical insights for policymaking and ratemaking.
- Presented findings to the research team through an interactive RShiny dashboard, facilitating informed decisionmaking.

# University of Prince Edward Island - Charlottetown, PEI

Summer 2018, 2019

Ouantitative Researcher

- Constructed a novel geometric risk measure for portfolio construction that incorporates probable asset price paths
- Applied Monte Carlo simulations, SDEs, and Black-Scholes-based replication models using R, Python, and MATLAB.
- Awarded second place in the Statistics division at Science Atlantic 2018 for presenting this research.

#### **EDUCATION**

**Master of Mathematics (MMATH) in Computational Mathematics**, 4.0 GPA *University of Waterloo, Ontario, Canada* 

September 2022 – October 2023

**Bachelor of Science in Actuarial Sciences**, 4.0 GPA **Bachelor of Science in Financial Mathematics**, 3.5 GPA *University of Prince Edward Island, PEI, Canada* 

September 2020 – May 2022 September 2014 – May 2019

#### **AWARDS & CERTIFICATES**

- **Certificates**: Google Data Analytics Professional Certificate (R, SQL, Google Sheets), DataCamp (Associate Data Analyst in SQL, Data Analyst in Python, PyTorch for Neural Networks and Large Language Models, Hugging Face)
- Awards: Fong Computational Math Graduate Award (\$7,500), Graduate Honors 90% GPA average standing, Best Teacher Assistant Award, Natural Sciences and Engineering Research Council of Canada (NSERC) Grant (\$10,000), Undergraduate Dean's List for 95% GPA average standing, Harry MacLauchlan Memorial Award in Mathematics (\$1280)

<sup>&</sup>lt;sup>1</sup> Quantitative Assessment of The Group of Seven's Collaboration in Sustainable Development Goals