Philip E. Bui

(819) 919-2292 • Canadien Citizen • philip.bui@umontreal.ca • philipenzobui.github.io

EDUCATION

Université de Montréal **Montréal, Canada**
M.Sc. in Applied Mathematics *Intended Graduation 2025*

- **Research interests**: Machine Learning Applications to Finance
- **Supervisor**: Dr. M. Augustyniak
- **Machine Learning (Mila)**: Fundamentals of Machine Learning, Deep Learning
- **Applied Mathematics (UdeM)**: Bayesian Statistics, Mathematical Finance (Arbitrage Theory)

Université du Québec à Montréal **Montréal, Canada**
B.Sc. in Actuarial Mathematics *Sept 2019 – May 2022*

- **Courses**: Probability, Statistics, Linear Algebra, Data Science, Predictive Analytics, Real Analysis, Discrete Mathematics, Linear Modelling, Financial Mathematics

TECHNICAL SKILLS

Tools/Technologies: Python, R, SQL, LaTeX
Libraries/Frameworks: TensorFlow, PyTorch, Scikit-Learn, Pandas, NumPy, BeautifulSoup, Matplotlib
Languages: Native in English & French

AWARDS & ACHIEVEMENTS

IVADO Fin-ML CREATE Research Scholarship **$7,500**

- Research scholarship for exceptional students

Telus HEALTH Scholarship **$3,000**

- Academic excellence award for student in mathematics and statistics

PROFESSIONAL EXPERIENCE

University of Montreal **Montréal, Canada**
Teaching Assistant – Intro to Financial Mathematics *Sep 2023 – Dec 2023*

- Held weekly recitations and 1-on-1 meetings to help understand concepts to approximately 100 students
- Coordinated with team of TAs and professor and led discussions on potential course improvements

Telus HEALTH **Montréal, Canada**
Senior Actuarial Analyst – Pension & Investment Consulting *Jan 2022 – Aug 2023*

- Designed Python mortality prediction model for small-size pension funds, deployed company-wide and used to adjust mortality assumptions for actuarial valuations, improving mortality accuracy by 15% over baseline tables
- Conducted company-wide trainings on data cleaning, analysis, and best practices to new and advanced employees
- Performed over 20 general stochastic modelling of assets and liabilities of clients' pension plans

Desjardins Financial **Toronto, Canada**
Actuarial Intern – Group Insurance *May 2021 – Aug 2021*

- Identified key drivers of length of contract with Desjardins using regression-based analysis with R, presented results to department executives

GRADUATE COURSEWORK PROJECT

Classification of Extreme Weather Events (github)

- Utilized Python and relevant data science libraries (NumPy, Pandas, scikit-learn) for data analysis and modeling
- Explored multiple classification models, such as Logistic Regression, Random Forest and XGBoost, among others
- Conducted ample feature engineering (geographical, time-based, meta features) on dataset to enhance performance