# Alexander Konjarski

## EDUCATION

**Rotman School of Management & Department of Economics, University of Toronto** Toronto, Ontario
*Master of Financial Economics* *Expected June 2026*
– **Relevant Courses:** Financial Economics, Econometrics, Corporate Financing II, Options and Futures, Microeconomics

**Departments of Management & Economics, University of Toronto, Mississauga** Mississauga, Ontario
*Bachelor of Commerce, Finance and Economics Specialist* *Sept 2018 – Apr 2022*
– **Academics:** cGPA 3.61/4.0
– **Awards:** Graduated with High Distinction; Dean's List Scholar
– **Relevant Courses:** Predictive Analytics, Machine Learning, Applied Econometrics, Fixed Income Markets, Options and Futures, Asset Pricing, Financial Risk Management, Macro & Microeconomics

## PROFESSIONAL EXPERIENCE

**Bank of Canada** Ottawa, Ontario
*Research Assistant – Economic & Financial Research Department* *Sept 2022 – June 2024*
– Used various programming languages to engineer data pipelines for processing financial data lakes with millions of TAQ observations from Refinitiv, CanDeal, and MTRS
– Collaborated with Directors and Senior Research Officers on research projects to manage financial data, creating custom scripts whose purpose ranged from data processing to statistical analysis
– Delivered frequent presentations to Directors and Researchers, highlighting trends, potential complications, and discussed next steps

Notable Projects:
Code and data replication package – *Intermediary Leverage Shocks & Funding Conditions* (*Journal of Finance*, forthcoming)
- Constructed beta-sorted portfolios of equities where the betas were estimated with respect to changes in illiquidity, volatility, and funding liquidity using security-level data from the CRSP at the daily frequency
- Estimated structural shocks from paper using a VAR to produce leverage supply and demand shocks to financial intermediaries to be used as factors in asset-pricing tests
- Conducted asset-pricing tests via two-stage Fama-MacBeth regressions to capture the price-of-risk estimates from VAR estimates, comparing results with previous literature

Data cleaning project – Canadian Investment Regulatory Organization (CIRO) Market Trade Reporting System (MTRS)
- Selected by Senior Researchers to clean 50M+ trades of Canadian fixed income securities and re-purchase agreements data
- Produced a methodology for identifying firm type (e.g., hedge fund, mutual fund, pension fund) at the transaction-level
- Created a trade-classification algorithm, identifying whether a transaction was conducted as agency or principal across all CIRO registered broker-dealers

**Department of Management, University of Toronto, Mississauga** Mississauga, Ontario
*Teaching Assistant – Business Technology Management (Professor O. Yung)* *Winter 2022*
– Introduced 60 business students to the Python programming language, including packages like pandas and matplotlib, with a focus on financial applications
– Invigilated course examinations and graded student projects and assessments

## EXTRACURRICULAR ACTIVITIES

**Department of Management, University of Toronto, Mississauga** Mississauga, Ontario
*Research Project – Predictive Analytics (Professor A. Steck)* *Winter 2022*
– Used the R statistical package to predict the spread between the two cryptocurrencies $BTC and $ETH across time
– Collected and processed hour-level tick data for variables believed to provide a significant level of predictive power
– Fitted various supervised learning approaches to train set, employing re-sampling methods to help select model flexibility
– Assessed model performance using various metrics (adjusted R2, test mean squared error, Bayesian Information Criterion)

## PERSONAL

– **Technical skills**: FactSet, Excel, PowerPoint, *Intermediate:* Python, R, Stata, *Beginner:* SQL, Julia, MatLab
– **Languages**: English, Conversational Macedonian
– **Interests**: Karate (1st Degree Black Belt, Gōjū-ryū), Astronomy, Historical Architecture