

# ZIQI YANG

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## EDUCATION

### University of Windsor

*Master of Arts in Economics*; GPA: 89/100

**Windsor, ON**

September 2018 – October 2020

### University of Toronto

*Honors Bachelor of Science in Economics and Statistics*

**Toronto, ON**

September 2014 – June 2018

## WORK EXPERIENCE

### Bank of Montreal

*Business Consultant, Market Risk Infrastructure*

**Toronto, ON**

May 2023 – March 2024

- Independently initiated Power BI dashboards to present the overall outlook of market data and proxy data, periodic proxy assessments for each asset class, and input data catalogue visualization. This effort involved designing, creating DAX formulas, collecting data, and developing Python scripts for data consolidation and cleaning
- Engineered end-to-end automated control tool in Python to identify data discrepancies within CCR Measurements for FPDC Carve Out per counterparties across Adaptiv and CCS system, ultimately enhancing work efficiency and accuracy
- Ensured and maintained daily data accuracy for PFE and Settlement reporting limits based on financial products for each counterparty, mitigating CCR associated with data discrepancies
- Provided ad-hoc daily support to identify and resolve DSR Bond Spread data issues using Python, SQL, EXCEL VBA, mitigating DSR PnL and VaR impact
- Evaluated and summarized periodic assessments for DSR Bond Spread, which involved calculating the impact and exposure of bonds, identifying bonds that exceeded the threshold, and determining rankings of proxy bond
- Identified monthly proxy data usage for DSR Bond Spread in VaR, and two months' proxy usage in equity in VaR and SVaR period
- Conducted data extraction from a 2+ GB BMO SM File to retrieve securities along with their ratings from different rating agencies, and extract the corresponding issuer ratings based on rating agency and rating purpose
- Performed data manipulation to categorize different ratings of securities and implemented Pivot Tables to illustrate the distribution of securities with rating across various asset classes

### Bank of Nova Scotia

*Manager, Model Validation and Approval, Global Model Risk Management*

**Toronto, ON**

April 2021 – March 2023

- Validated and reviewed regulatory capital models under Basel III and OSFI requirements, including (but not limited to) SFT VaR, SFT EAD, SWWR, SACCR Process for the enhancement to supervisory delta, and CCR capital for EWST
- Evaluate the performance of Machine Learning models by calculating accuracy, precision, recall, and F1 score
- Conducted the implementation tests and impact analysis to independently replicate and compare with model developer's results (EE, EAD, PFE, MTM, RWA, etc) using Python
- Assessed the reasonableness of model methodology by performing detailed analysis in Python and SQL
- Assessed the goodness of data quality based on two period (VaR stress period and regular period) due to model change

### University of Windsor

*Research Assistant, Faculty of Economics*

**Windsor, ON**

June 2020 – July 2020

- Identified potential market risk and credit spread risk by analyzing the change of financial market in Canada and other countries due to Covid-19
- Assessed the effectiveness and reasonableness of the monetary tools, including the open market operations and interest rate policy, in response to Covid-19

### University of Windsor

*Graduate and Undergraduate Teaching Assistant*

**Windsor, ON**

January 2019 – April 2020

- Tutored graduate-level courses in Econometric Economics and Mathematical Economics

## PUBLICATIONS

### Major Research Paper

**University of Windsor, ON**

Yang, Ziqi, "Economic Growth and Water Pollution in the Circum-Bohai-Sea Zone in China - An Environmental Kuznets Curve Analysis" (2020). Major Papers. 139. <https://scholar.uwindsor.ca/major-papers/139>

- Developed 3 quadratic forms of econometric models to examine the association of relevant water pollution variables and per-capita GDP. Improved the model according to the estimation results
- Generated graphs to analyze the trend of each model, and combined a proxy factor of technologies to see how technologies impacts the changes of water pollution and economic growth across different subregions

## SKILLS, ACTIVITIES & INTERESTS

**Technical Skills:** Python, SQL, SAS, R Studio, Unix Bash Script, Excel, VBA, STATA, Power BI, Visio

**Certifications & Training:** SAS Certified Base Programmer for SAS 9 (2017); DataCamp certified training courses (2022) – Joining data with pandas, Data Manipulation with pandas, Python Data Science Toolbox (Part 1), and Credit Risk Modelling in Python (2024); Understanding Capital Markets (2023); Market Risk Management (Frameworks & Strategies) (2024) *New York Institution of Finance*; FRM Level I Candidate