

ANDREW GIRGIS

🏠 Mississauga, ON

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EDUCATION

University of Waterloo

Sep 2023 – Apr 2025

MA, Economics; Graduate Diploma in Computational Data Analytics

Waterloo, ON

GPA: 82%

Achievements: University of Waterloo Scholarship

Coursework: Data Science for Economists: 91%, Intro to Machine Learning for Public Policy: 90%, Machine Learning for Economists: 88%, Exploratory Data Analysis: 89%, High Dimensional Data: 87%, Data Visualization: 86%

Brock University

Sep 2017 – Apr 2023

BA, Economics (Honours), Minor in Applied Computing

St. Catharines

GPA: 84%

Achievements: Dean's Honour list

Coursework: Financial Economics: 96%, Mathematical Methods in Economics: 80%, Forecasting using Time Series Data: 82%, Empirical Methods: Microeconomics 80%, Empirical Methods: Time Series 73%, Statistical Regression Analysis: 70%, Personal Computers and Networks: 86%, Economics of the Multinational Enterprise: 85%, Introduction to Human Computer Interaction: 75%

EXPERIENCE

Quartermaster

August 2025 – Present

Data Analyst

Toronto, ON

- Building complex SQL queries to pull, clean, and aggregate data from multiple sources, ensuring accuracy, reliability and consistency.
- Working with stakeholders (Product Managers and Team Leads) to define clear metrics, and translate business questions into data-driven insights.
- Cleaning, manipulating, and modelling data from multiple sources, then publishing in Tableau for team-driven analysis.
- Partnering with team members to understand KPIs and build Tableau dashboards to monitor progress towards these KPIs.
- Working with non-technical team members to use and interpret data and dashboards.
- Helping to inform data modelling and transformation in the ETL process of data warehousing initiatives.

National Research Council Canada

April 2024 - December 2024

Junior Analyst

Oakville, ON

- Developed an AI chatbot using NLP techniques to filter unqualified client inquiries, improving service efficiency and saving 25 hours per employee annually.
- Applied predictive modeling on large travel expenditure datasets to forecast costs and generate a strategic budget report for the upcoming year.
- Visualized and analyzed survey data from 500+ employees using PowerBI, communicating key trends and insights to senior leadership.

Centre for Finance, Technology and Entrepreneurship

Feb 2025 – Aug 2025

FinTech Analyst

London, UK (Remote)

- Evaluated 7+ AI/ML platforms by documenting practical use cases and technical insights for leadership.
- Produced succinct 10-minute educational video content that merged technical and communication skills to clarify complex financial technology concepts.

TechPlace

Business Development Intern

Jun 2023 – Oct 2023

Burlington, ON

- Managed CRM migration to Archie, effectively reducing booking time by 30% and analyzing web traffic via Google Analytics.
- Streamlined the new-client onboarding process with Power Automate, cutting processing time from over 24 hours to approximately 8 hours.

PROJECTS

LinkedIn Scraper & Analytics <https://github.com/Andrew-Girgis/linkedin-job-scraper> 2025

- Built a Selenium-based pipeline to scrape and structure LinkedIn jobs (title, company, description) into MongoDB.
- Developed NLP routines to extract and normalize required skills, seniority level, and employment type; achieving 93% extraction accuracy.

Stock Forecasting with VAR-GARCH <https://andrew-girgis.com/researchpaper> 2023

- Built forecasting models for BEV stocks using VAR and GARCH; assessed volatility using MAPE.
- Integrated external regressors like lithium and gasoline prices.

Predictive Modeling on Academic Behavior 2023

- Used 11 years of university platform data to model causal impact of late-night learning behaviour on GPA.
- Developed and evaluated SVR, XGBoost, and Neural Net models; presented recommended model to team.

TECHNICAL SKILLS

Languages: Python, R, SQL, JavaScript, HTML, CSS, LaTeX

Tools: VS Code, n8n, Relay, PowerBI, Gephi, Google Analytics, Big Data Tools

Libraries: scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, PyTorch, TensorFlow, NLTK, VADER

Concepts: Forecasting, Regression, NLP, Clustering, Dashboarding, Time Series Modeling, Machine Learning, Predictive Modeling

LEADERSHIP & AWARDS

Rotman Datathon - CxC Hackathon: Predictive analytics and ML challenges under time pressure.

Dean's Honour List: Awarded for academic excellence in Economics (Top percentile).

Vice President: Vice President of the University of Waterloo Economics Society.

Student Ambassador: Volunteered as a Development of Program Analyst in the NRC Student Ambassador Program, where I contributed to event ideation and planning, managed communications, and conducted surveys to assess and enhance student experiences, leading to improvements in the current and future NRC student programs.