Summary of Skills

* Proficient in Python and R for use in applied economics and finance, excelling in data analysis, forecasting and machine learning.
* Experienced in presenting and exploring data using Power BI, SQL, Excel, Tableau, PowerPoint, Jypter Notes, and R Markdown.
* Proficient in Microsoft Excel, including pivot tables, VLOOKUPs, and basic macro programming for streamlined data analysis and automation.
* Swift to learn new concepts and processes, excelling in high-pressure, time-sensitive situations.

Education

**Master of Art, Economics with Finance Specialization Sep '22 – May '23**

*University of Guelph, 50 Stone Rd E, Guelph, ON*

* ***Artificial Intelligence for Finance Course & Project***: Proficient in using python for data analysis of, linear regression and regularization, supervised and unsupervised learning, tree-based methods, and deep learning models relevant to financial applications. Incorporated techniques into a project based on classification of weekly stock returns.
* ***Labor Economics Course & Project***: Empirical methods and Python programming for applied microeconomic analysis **(Linear Regression, Regression Discontinuity, and Fixed Effects)**. Conducted a comprehensive Labor Project utilizing over 50 years of Labor Force Survey data to investigate the impact of Federal and Provincial wage increases on youth unemployment throughout Canada.
* **Special Topics in Finance Course**: Covered financial forecasting, modeling, and risk management with Python. Proficient in time series forecasting **(ARIMA)**, volatility modeling **(ARCH, GARCH)**, and deep learning models **(RNN, DL)** for finance.
* Teaching Assistant for Introduction to Econometrics, providing weekly R programming and econometric problem set support.
* Research Assistant for two projects: Data analysis on safeguard tariffs for US and Chinese trade and conducted data analysis for a paper on developing bond markets in 3rd world countries.

**Bachelor of Commerce, Management Economics and Finance (Co-op) Sep '17 – May '22** *University of Guelph, 50 Stone Rd E, Guelph, ON*

* **Advance Topics in Finance Course & Project**: Proficient in using R for data analysis and machine learning methods relevant to economic and financial applications. Incorporated techniques into a project based on forecasting future bitcoin prices.
* **Advanced Financial Econometrics Course & Project**: Financial data with GARCH models, extensions, multivariate generalizations, stochastic volatility models, and realized volatility. Project focused on risk forecasting and optimizing portfolios for multiple equities using standardized methods.
* Completed courses in financial derivatives, advanced econometrics, business analytics, industrial organization, investments, and both advanced micro and macroeconomics.
* Graduated with distinction achieving a final 3.77 GPA.

Relative Experience

**Linamar Corporate Data Analyst Co-op Position May '21 - Sep '21 & Sep '20 - Dec '20**

Linamar Corporate, 287 Speedvale Ave W, Guelph, ON

* Self-taught R programming to apply and create algorithms on existing datasets for outlier detection and hybrid forecast models, while documenting in R markdown files.
* Developed a forecast ranking method using linear optimization to empirically define the best model out of hundreds of thousands of unique forecast combinations.
* Implemented a potential method to quickly validate thousands of invoices for syntax and errors using algorithms and regular expressions in R.
* Automated performance analysis documents using a combination of R, Python, and Excel to process model performance in minutes saving hours of manual work.
* Created Power BI reports integrated with R visuals and R programs to visualize immense amounts of data and presented to senior executives.
* Finished both four months co-ops with outstanding reviews.

**Linamar Facility Accounting Co-op Position May '19 - Jan '19**

*Skyjack, 201 Woodlawn Road West, Guelph, ON*

* Assisted with month end and quarter end close process, accounts payable and accounts receivable, and other general accounting duties.
* Recorded the collection of millions in cheques, wires, and intercompany payments.
* Inputted thousands of data entries with minor room for error into multiple ERP systems.
* Worked independently and with teams of one to three in a fast-paced environment.
* Created and updated excel spreadsheets with VLOOKUPs, match index functions, pivot tables, and basic macros for new and existing processes.
* Finished the eight-month co-op with an outstanding review.

Extra-Curricular Involvement

**Extended Play (EP) Project Aug '21 - Jun '22**

*Guelph, ON*

* Engaged in weekly meetings with industry professionals on writing, recording, mixing, and mastering for the future EP.
* Researched industry recording techniques, such as digital audio workstations, plugins, mixing, and mastering.
* Developed knowledge on software such as Audacity, Guitar Pro Seven, EZ Drummer, and Reaper.
* Completed composing and recording six songs with bass, drums, rhythm, and lead guitars ready for mixing, mastering, and final release in June 2022 for all major platforms.