

Ariel Khait

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EDUCATION

University of Toronto

Class of 2025

HBSc. ; Financial Economics Specialist; Computer Science Minor; Mathematics Minor;

Major GPA: 3.64/4.0

- Relevant Coursework: Financial Risk Management, Machine Learning Application in Macroeconomics Finance, Financial Economics, Applied Econometrics I&II, and Data Analytics and Econometrics in Practice
- Awards: Foundation of Canada Scholarship, Dean's List (22-24), William Gear Fellowship Award
- Clubs and Activities: RiskLab UofT, Vertige Investment Club, and Phi Gamma Delta Fraternity

WORK EXPERIENCE

Rotman School of Management

Toronto, ON

Research Assistant for Professor Ing-Haw Cheng

May 2024 – Sept 2024

- Utilized machine learning methods to forecast market volatility (VIX) to be used in a derivative trading strategy
- Improved best VIX index forecast (Corsi 2009) by building a neural network that combines features such as autoregressive markers and other market factors such as CPI, exchange rates, and market tightness
- Developing a VIX futures trading strategy utilizing a series of recurrent neural network models
- Cleaned, reorganized, and aggregated data for over 20 features from Fred, Bloomberg, Yahoo, and other sources
- Communicated findings consistently to Professor Cheng leading into the process of writing a published report

Trade Up to Wall St

New York City, NY

Quantitative Developer

Oct 2023 – Sept 2024

- Developed and integrated new functionalities to an educational app to provide students with a platform to hone their trading abilities and gain practical experience in real-world trade execution
- Utilized a wide variety of Python libraries such as Pandas, Sklearn, and NumPy to analyze stock price data from Bloomberg for 20+ portfolio metrics such as Sharpe Ratio, CAGR, Beta Coefficients, and many more
- Analyzed user data, in Python, and presented findings leading to a 13% increase in user engagement

Huntstone Capital

Toronto, ON

Intern Analyst

May 2022 – Sept 2022

- Analyzed 3 CIMs per week on factors such as industry growth rate, financial statements, customer and supplier relations, and legal structure – presented findings weekly to a team of 10 people
- Performed extensive analysis on 120 companies per week, based on factors such as size, ownership, maturity, and industry profitability resulting in 25 percent of said companies being selected for an acquisition inquiry
- Dissected 1 to 2 industries per week based on factors like barriers to entry, customer concentration, consolidation trends, profit margins, and fragmentation to further identify niche markets.

PROJECTS

Kenvue Equity Research Report

Jan 2024 – April 2024

- Utilized a Discounted Cash Flow Model, Discounted Dividends Model, and Comparable Ratios to provide an investment recommendation supported by a fair price valuation for Kenvue Incorporated
- Applied a combination of Adjusted Present Value and Weighted Average Cost of Capital analyses to navigate fluctuations in the debt-to-equity ratio to calculate WACC and Cost of Equity post-IPO (March 2023)
- Analyzed public SEC filings, 10-k reports, and diverse media sources to support predictions about fluctuations in profitability and costs, enhancing the accuracy of fair price estimations

Predicting Dividend Increases with ML

Sept 2024 – Current

- Applied Penalized Logistic Regression, tree-based methods, KNN, Naïve Bayes classifiers, and Neural Networks to predict increases in dividend yields for S&P 500 companies over the following calendar year
- Extended previous literature primarily focused on firm-specific data by incorporating macroeconomic features
- Achieved a final model accuracy of 86.85%, surpassing the previous literature's model while identifying key micro and macro predictors of dividend yield increases
- Summarized findings in a 20-page report, which received the highest honors in the class

Skills: SQL, Python (Pytorch, Sklearn, Pandas, NumPy, ...) , MATLAB, R, Stata, Java, MS Office

Languages: English (Fluent), Russian (Communicative), and Hebrew (Communicative)