ALI ASADPOOR

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SUMMARY OF QUALIFICATIONS

- Proficient in Python and Matlab, with hands-on experience applying quantitative techniques, including statistics, machine learning, and optimization to financial data analysis and portfolio management
- Strong skills in data sourcing, cleaning, visualization, and predictive modeling using Pandas, NumPy, Matplotlib, etc.
- · Experienced in implementing and critiquing academic research through personal and academic research projects
- Developed and optimized portfolio implementation tools using programming and data science techniques, contributing to improved investment strategies
- Engaged in academic and personal projects focused on the application of quantitative research in equities, fixed income, derivatives, and currencies
- Certified in Python for Data Science (IBM), Bayesian Statistics (UC), and Algorithmic Trading and Finance (LinkedIn)

EDUCATION

Toronto Metropolitan University

Toronto, ON

Bachelor of Science in Computer Science, Minor in Economics

January 2023 - June 2027

- Dean's List: 2023-2024 (GPA: 3.86)
- Relevant Courses: Computer Science (Python), Probability and Stats, Machine Learning, Linear Algebra

EXPERIENCE

Economics Research Assistant

October 2024 – December 2024 (Starting October 14)

Rogers Cybersecure Catalyst

Toronto, ON

• Expected to apply statistical analysis techniques using Python in the review of research related to economic decision support, options theory, and game theory in determining real options value of cybersecurity investments

Technical Assistant August 2024 – October 2024

Toronto Metropolitan University – CCS

Toronto, ON

- · Developed a Python script to automate updates to website content, saving 2+ hours of manual work per task
- Cleaned and Processed large datasets (30,000+ rows) using Python scripts in Excel, assisting with operations
- Extracted 40,000+ user metric data using SQL and Python, optimizing data-driven content placement on website
- · Developed data visualization dashboards with Power BI and Matplotlib to communicate key insights to stakeholders

Part-time Merchandising Assistant

April 2022 – Present

Costco Canada

Markham, ON

- Collaborated with a team of 15 to ensure optimal stock levels for 5,000+ daily customers in a fast-paced space
- Analyzed foot-traffic and optimized product placement, leading to a 8% sales growth over a 6-month period

In-store Technical Agent

September 2021 - April 2022

Best Buy Canada

Richmond Hill, ON

• Sourced system data from 1000+ devices and presented 3 key findings, resulting in a 30-min service time reduction

PROJECTS

Portfolio Optimization Tools | PyTorch, scikit-learn, Pandas, NumPy, Matplotlib, Flask, scipy, yfinance

Project Link

- Developed a Python machine learning tool for portfolio optimization, processing data for 5000+ stocks
- Applied quantitative techniques like Bayesian statistics, optimization, and predictive along with supervised and unsupervised machine learning models (K-means clustering, decision tree classifier) to enhance portfolio return
- · Created interactive visualizations in Matplotlib and used Flask to build a real-time portfolio tool

EXTRACURRICULAR

Options Trading Competition – TMX Group

September 2024 (Ongoing)

- Implemented quantitative trading strategies using Python for delta hedging, achieving a 24% portfolio return
- Utilized derivatives pricing models (e.g., Binomial Lattice, Black-Scholes) to manage multi-asset portfolios
- Used Python to apply statistical analysis, backtesting, and volatility analysis to optimize risk-adjusted returns

Python for Data Science - IBM

September 2024 – Certification Link

• Developed expertise in machine learning, data analysis, visualization, and statistical modeling using Pandas, NumPy, and scikit-learn

Bayesian Statistics: From Concept to Data Analysis – UC Santa Cruz

September 2024 – Certification Link

• Gained proficiency in Bayesian inference and modeling, applying it to real-world data using Python for statistical computing

Algorithmic Trading and Finance with Python, R, and Stata - LinkedIn

October 2024 - Certification Link

• Built quantitative trading models using Python, R, and Stata for data analysis and regression analysis