

Aryan Ahadimoghaddam

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RELEVANT EXPERIENCE

Software Engineer, Majesco, Ottawa, Canada

05/2022 – Present

- Developed, tested, and optimized actuarial pricing models in a team of five committed to the agile methodology using the project management tool Jira; framework written in both Java (Spring) and a proprietary language to create a robust rating engine; framework sold as software to the actuarial and underwriting teams of North America's largest insurance carriers (Blue Cross Life, Beneva, RBC, Canada Life), resulting in up to a 92% decrease in time-to-rate and up to 80% in overall processing times.
- Took ownership over several products (EAP, VHS), which required me to develop knowledge of actuarial operations; simplified complex actuarial problems, often in technical Excel documents, into their mathematical core by assisting in documenting actuarial pricing model specifications; documentation allowed for precise coordination of development, business analysts, and rating team, which allowed the organization to commit to projects with tight deadlines of approximately one year.

Business Analyst (Global Wholesale Operations), Scotiabank, Toronto, Canada

10/2021 – 05/2022

- Processed up to USD 30 billion worth of trades per day by utilizing proprietary bank software to reconcile trade tickets manually, reconciliation frequently requiring liaison with front-office traders and directors along with middle-office settlements and back-office confirmations; Products traded spanned swaps, futures & options, and FX; Personal performance led to a 35% decrease of outstanding confirmations over five months.
- Drafted, dispatched and executed trade confirmations by becoming familiar with industry regulations such as CSA, Dodd-Frank & EMIR; ensured continued compliance with regulations and bank's risk appetite by analyzing ISDA and MSTFA Master Agreements resulting in positive feedback from managers and directors.

Research Internship, Carleton University, Ottawa, Canada

04/2021 – 09/2021

- Worked alongside Dr. Sana Mohsni from Carleton University in conducting a study on how female directors impact a firm's overall ESG score; manipulated data in Python using libraries such as Pandas, Matplotlib, Requests, Linearmodels and Seaborn to scrape JSON data from Bloomberg and WRDS REST API to perform a panel study and visualization of data over ten years; study resulted in a finding that increasing a board's gender diversity has a positive and statistically significant effect on a firm's ESG score, allowing shareholders to have more significant insights on creating an optimal composition of their board of directors.

PERSONAL PROJECTS

Trading Floor Display, RGB LED Stock Ticker

- Developed a LED Matrix powered by a Raspberry Pi to display open, high, low, and close data for over 100 companies along with their logo; utilized Python along with Requests, PIL, and matrix display libraries, implementing an abstract factory design pattern, to fetch JSON data (cached locally) returned from a variety of data providers REST API's; ticker enhanced ability to understand portfolio performance in real-time.

Exploiting Cyclical Economic Trends Using a Sector Rotation Strategy

- Designed and developed a composite index of economic indicators to identify which stages of the business cycle the S&P Sector ETFs outperform the S&P500; collected and manipulated data in Python using Scipy, Matplotlib, Seaborn, and Pandas, scraping JSON data from Bloomberg's REST API to perform signal processing on the economic cycle; signal generated optimal portfolio weightings/rebalancing throughout the business cycle that often outperformed the S&P500.

ADDITIONAL INFORMATION

- **Skills:** Python (Pandas, Numpy, Matplotlib, Linearmodels, Seaborn, Scipy, Requests, Pillow Image Processing), Java(Spring), HTML, CSS, MATH proprietary language, Javascript, Github, Jira
- **Additional Courses:** Capital Market Training Program (FX, Derivatives, Market Data), Getting Started with Spring Boot, Spring Data JPA Master Class, Spring Boot Master Class, Streamlined Data Ingestion with Pandas, Data Engineering
- **Interests:** Chess, Soccer, Dungeons and Dragons

EDUCATION

Bachelor of Commerce (Honours), Carleton University, Ottawa, Canada

08/2017 – 07/2021

- Cumulative GPA: 3.7/4.0; ranked in the top 10% of the entire school for my entire educational tenure
- Graduated with Distinction; Deans List for three years; CFA Scholarship
- Sprott Student Investment Fund Equity Analyst