Arya Patel

EDUCATION

University of Waterloo

Waterloo, ON

Candidate for Bachelor of Computer Science & Finance, Double major - CFM

GPA: 3.9

• Courses: Introduction to Financial Markets and Data Analytics & Foundations for Financial Reporting

SKILLS

Languages: Python, C#, Java, JavaScript, C, Typescript, HTML, CSS, IATEX, Racket Frameworks/Tools: Git, React, Node.js, Flask, Bootstrap, Figma, MySQL, AWS, VS Code

EXPERIENCE

UW Blueprint

December 2023 - Present

 $Software\ Developer$

- Reduced processing time by 40%, enabling quicker turnaround for incoming applicants and company sponsors.
- Achieved a 50% increase in user adoption within the first six months after my frontend implementation
- Utilized cost-effective solutions, for a 25% reduction in administrative costs for non-profit partners after handover

JPMorgan Chase & Co.

March 2022 - September 2022

Software Engineering Virtual Experience - New York (Remote)

- Built a robust internal system tool utilizing Python scripts utilized to analyze stock price data feeds and reports
- Successfully pushed **React** and **TypeScript** components into Perspective, a JPMorgan **open source** software
- \bullet Created comprehensive test suites using Mocha and Chai to reduce intermittent issues by 35%

Westend March 2022 - September 2022

Software Developer - Toronto

- $\bullet \ \, \text{Built a robust internal system tool utilizing } \textbf{Python} \ \text{scripts utilized to analyze stock price data feeds and reports}$
- Developed a full-stack web application using Python, Flask and MySQL to execute online room reservations
- Obtained a 4.76/5 customer satisfaction rating for EasyCheckout by analyzing customer reviews and ratings

PROJECTS

ECHO | Hume AI, React, Node.js, JavaScript, TypeScript

- Developed a real-time sentimental analysis application to do reminiscence therapy for dementia patients
- Achieved a 25% improvement in mood prediction accuracy compared to start-up industry benchmarks
- Implemented **HUME AI** technology to analyze voice intonation, body language, and movement.
- Published a white-paper on ECHO's methodology, to emphasize the ability to leveraging AI for dementia care.

Promptopia | JavaScript, TypeScript, Next.js, HTML/CSS, Git

- A full-stack CRUD based Next.js application, coupled with React Hooks and GraphQL technologies
- Achieved a 20% reduction in page load times through code refactoring, allowing for exceptional scalability
- Architect and built an OOP-based framework, and utilized MongoDB to securely store and retrieve user data
- Employed CSS and JavaScript minification to optimize loading times and overall website performance by 4%

Robo-Advisor | Python, Pandas, NumPy, Matplotlib, Git

- A quantitative analysis script that generates the least volatile portfolio given arbitrary stocks
- Implemented multi-threading, queues and recursion to reduce request runtime from RESTful APIs by 50%
- Consistently generated a portfolio with over 40% less volatility compared to the S&P500 and NASDAQ
- Integrated a five-hundred thousand iteration Monte Carlo simulation that runs in 15 seconds or less

Achievements and Certificates

BigQuery for Machine Learning DECA ICDC (8th out of 26000) Toronto, ON — December 2019 Orlando, Fl — May 2023