Arya Patel

SKILLS

Languages: Python, C#, Java, JavaScript, C, Typescript, HTML, CSS, LATeX, Racket

Libraries: Pandas, NumPy, Matplotlib

Frameworks/Tools: Git, React, Node.js, Flask, Bootstrap, Figma, MySQL, AWS, VS Code

EDUCATION

University of Waterloo

Waterloo, ON

Candidate for Bachelor of Computer Science & Finance, Double major

GPA: 4.0

• Courses: Designing Functional Programs and Algorithm Design and Data Abstraction.

EXPERIENCE

JPMorgan Chase & Co.

June 2023 - August 2023

Software Engineering Virtual Experience - Remote/Online

- 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

Freelance Full-Stack Developer - EasyCheckout

- Developed a full-stack web application using Python, Flask and MySQL to execute online room reservations
- Implemented an online checkout option as a solution to reduce in-person traffic, increased sales by 25%
- Obtained a 4.76/5 customer satisfaction rating for EasyCheckout by analyzing customer reviews and ratings

Projects

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

- A full-stack CRUD based Next is 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

<u>Chatter</u> | React, Node.js, JavaScript, Express.js, Socket.io

- Developed a real-time **React** and **Socket.io** chat application for bidirectional communication between users
- Constructed the backend using Node.js and Express.js, achieving a 30% improvement in server response time
- Utilized JavaScript ES6+ features to reduce code complexity by 25% and facilitate improved maintainability
- Implemented user authentication (OAuth), preventing unauthorized access and ensuring data security

ACHIEVEMENTS AND CERTIFICATES

BigQuery for Machine Learning Hack the North Finalist DECA ICDC (8th out of 26000) Toronto, ON — December 2019

Waterloo, ON — September 2022

Orlando, Fl — May 2023