Brashan Mohanakumar

647-200-3485 bmohanak@uwaterloo.ca linkedin.com/in/brashan-mohanakumar
github.com/brashanm brashanm.github.io

Technical Skills

Languages: JavaScript, TypeScript, Python, C++, C, HTML, CSS, SQL
Technologies/Frameworks: Angular, React, Redux, MongoDB, Mongoose, Express.js, Node.js, Bootstrap
Analytical Tools: Pandas, NumPy, Selenium, Seaborn, Matplotlib
Developer Tools: VS Code, BitBucket, Git, Docker, Kubernetes, Jupyter, Postman, Figma, Jira, Confluence

Experience

Software Developer January 2023 – April 2023
TutorBright Toronto, Ontario

- Led the design and development of the resources page on the main web application, leveraging Angular, Node.js, Express.js, and MongoDB, benefiting a user base of over 60,000 students and tutors
- Enabled seamless retrieval, search, preview, and download of files through a server API, resulting in a 40% increase in file search/retrieval speed and an enhanced user experience for students and tutors
- Improved student program organization by designing and implementing a programs tab within client profiles with Angular and Node.js
- Developed user-friendly options for viewing, editing, and removing programs resulting in streamlined workflow for students, tutors, and company management

Sales and Operations Analyst May 2022 – August 2022
Ace Beverage Group Inc. Toronto, Ontario

- Designed and implemented a company-wide solution to automate sales data pulls and data entries using Python, NumPy, Pandas, and Selenium resulting in significant time savings and increased accuracy
- Deployed Python scripts on a Raspberry Pi to automate data entry tasks on a weekly basis
- Improved efficiency tenfold by eliminating manual data manipulation and ensured consistent and reliable updates to the database

Projects

TTD-Kicks eCommerce Website Source Code

- Utilizing the MERN stack to develop a dynamic, responsive, and secure eCommerce web application for customers trying to view or purchase merchandise
- Designed a user-friendly and responsive UI/UX using Figma and implementing it using React
- Developing an extensive backend using Express.js and a MongoDB database storing inventory data

SAPA (Sports Analytics Portfolio Application) Source Code

- Designed and implemented a Python solution to pro-actively provide analytical data and visualization of team and player statistics in real time
- Utilized NumPy and Pandas to perform data analysis on player & team statistics from an NBA API
- Visualized data using Seaborn/Matplotlib to show statistical findings on a Jupyter Notebook

Stock Portfolio Creator Source Code

- Developed a Python script that builds a profitable stock portfolio using data from Yahoo Finance
- Reads a .csv file of current S&P 500 stocks while performing data manipulation and analysis to filter out stocks that do not meet a given rate of return threshold using NumPy and Pandas
- The application resulted in successfully creating an investment portfolio of 10 high-risk S&P 500 stocks that developed a positive rate of return of 10%

Education

Bachelor of Computer Science, University of Waterloo September 2021 – April 2026