Shahir Chowdhury . Jarvis Consulting

Hello, I'm a new hire at Jarvis Consulting Group working as a technical consultant. I studied at the University of Windsor, completing my bachelor's degree in computer science and graduating with a major GPA of 3.7. During my time at the university, I interned for 16 months at IBM. While there, I primarily worked as a front-end developer, where I gained knowledge of how to create efficient and responsive UIs by developing features and workflows for SPSS Statistics, a statistical analysis application. Upon graduating, I worked for a year at Amazon on the operations side. My main focus was on developing the tools sellers would use to ship their goods to Amazon warehouses, which helped me learn the basics of working with microsystem architecture. I find learning to be a very fun process, which is why I think I enjoyed my time at IBM and Amazon with all of the opportunities they presented to dive deep into technologies I wasn't familiar with. I prioritize personal growth more than anything and am eagerly looking for opportunities to improve my skills as a software developer. Outside of work, I enjoy going for runs, weight lifting, and playing video games. I hope you enjoy reading my profile.

Skills

Proficient: Java, JavaScript, ReactJS, Agile/Scrum, Git, Unity, Microservices, Docker, MVC, REST APIs

Competent: C#, Python, Redux, TypeScript, SQL/Postgres, AWS, Azure, Spring/Springboot, Angular, JUnit

Familiar: Bash, Node.js, GraphQL, C/C++, Octave

Jarvis Projects

Project source code: https://github.com/Jarvis-Consulting-Group/jarvis_data_eng-shahiro770

Cluster Monitor [GitHub]: Implemented a monitoring agent to collect real-time resource usage of nodes in a Linux cluster using, using Bash shell script. The app runs via a crontab daemon on the respective hosts, periodically collecting metrics required by the Jarvis LCA team using command-line utilities such as vmstat and lscpu. The results are then stored in a relational database via PostgreSQL, where they can be queried for analysis. The app is run from a Docker container for ease of deployment and modification.

Grep App [GitHub]: Created a command-line tool modeled after Grep using Java's regex API. The tool takes in a pattern and writes all lines that match the expression in a given directory to a specified outfile. The app makes use of modern Java 8 features, such as Lambda and Stream APIs to make the processing of the data efficient. The tool utilizes Maven as its build system and is deployed via Docker.

JDBC App [GitHub]: A simple Java app that uses the JDBC API to execute CRUD operations on a PSQL database. The app makes use of DAO and repository design patterns to maintain data integrity. The app had its dependencies managed via Maven and was deployed through Docker.

Twitter CRUD App [GitHub]: Created a Java CRUD application that uses Twitter's REST API v2 to create and manage tweets. The user can create tweets, search for tweets, or delete a list of tweets by ID, all from via CLI. The app sends requests to Twitter's API through HTTP requests in the form of JSON messages, authenticated with OAuth. The architecture used follows the MVC design pattern, with unit and integration testing being done through Mockito and JUnit. The build system used was Maven, and deployment was done through Docker.

Spring Boot Trading App [GitHub]: Developed the backend REST API for a proof of concept trading platform, allowing users to create an account, monitor their portfolio's performance, and buy and sell securities. The software architecture follows the standard MVC pattern, using Java and Spring for the layer implementations. User data is persisted in a PostgreSQL database via Spring JDBC, while market data is retrieved by leveraging IEX Cloud API. All endpoints are unit and integration tested via JUnit and Mockito. Dependencies were managed via Maven and Spring, with deployment done through Docker.

Highlighted Projects

CandleLight [GitHub]: Developed a two-dimensional roguelike adventure game in C# and Unity, similar to games such as The Oregon Trail. Following agile practices, I worked as the sole developer for the majority of the project, handling the creation of art assets, and designing and implementing the software architecture. The backend utilizes SQLite as the RDBMS for lightweight storage of player and game data. The game features hand-drawn pixel art, as well as the usage of various post-processing effects to provide an immersive experience.

Professional Experiences

Software Developer, Jarvis (2023-present): Working as a technical consultant, learning the latest in industry-standard full-stack development technologies and best practices. Projects are done in an agile environment, constantly working with senior consultants to maintain alignment on deliverables. Some of the topics trained in include the fundamentals of shell scripting in Bash, Linux, Docker, and PostgreSQL. A heavy focus has been put in developing Java apps, using well-known APIs such as JDBC to manage database transactions and other standard development patterns and architecture, such as DAO and MVC.

Software Development Engineer I, Amazon (2021-2022): Worked on the new platform, Send To Amazon (STA), developing tools related to the new workflow through which sellers create shipments for products, receive estimates for delivery, and ultimately schedule shipment transportation. Primarily used TypeScript and ReactJS for frontend-related work, and Java and Spring for backend-related API development and event orchestration. Additionally, worked on a bi-monthly basis as an on-call to handle tickets and maintain the microservices related to the team?s operation.

Software Developer, IBM (2018-2019): Developed tools with ReactJS and Javascript for the redesign of SPSS Statistics, a statistical analysis and data preparation application. This work involved utilizing various frontend spreadsheeting libraries, such as Handsontable and Ag-grid, for creating performant spreadsheets for displaying and modifying data. Additionally created and managed workflows for common parametric and nonparametric statistical methods analysis on data, with a focus on maintaining a fast and responsive UX.

Teaching Assistant, University of Windsor (2017-2020): Assisted computer science students with learning fundamental discrete math concepts, the basics of C, data structures, and computational theory. General duties would involve attending labs to help students with their assignments, creating exam review material, proctoring exams, and evaluating assignments and projects. Work was regularly divided up amongst a team of other teaching assistants, with some focus on collaboration to handle larger tasks such as final exam marking.

Education

University of Windsor (2016-2021), B.C.S. Honours Computer Science Co-Op with Minor in Mathematics, graduating with Distinction, Computer Science - Dean's Renewable Entrance Scholarship (2016, 2021): Maintained an average >80% - Dean's List (2016, 2021): Maintained an average >80% - Major GPA: 3.7/4.0

Miscellaneous

- I enjoy weight lifting on a consistent basis. It keeps me in a continuous loop of self-improvement that I find addictive.
- Video gaming is my favourite past time. I like action games with immersive story-telling.
- Running is something I'm getting into. I'm doing the popular C25K program in hopes of some day running a small marathon.