

Brandon Wei . Jarvis Consulting

I am a recent graduate from the University of Toronto with an Honours Bachelor of Science degree majoring in mathematics and minoring in computer science and statistics. I am proficient in core computer science concepts such as object-oriented programming, data structures/algorithms as well as general software design concepts. I also have a background in working with data from various statistics courses, which includes cleaning data and combining different datasets to make them easier to work with in the analysis process. Throughout my academic career, I have also honed my critical thinking and problem-solving skills on a daily basis. I consider myself someone who has a passion for learning, and what excites me the most about software engineering as a career is that nothing stays static and there are always new technologies to learn. All in all, I am excited to have the opportunity to work with other professionals in the field and apply my skills to industry-level projects.

Skills

Proficient: Javascript, Typescript, Angular, Node.js, Express.js, HTML/CSS, PySpark, Java, Python, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git

Competent: R, VIM, scikit-learn, Latex, Docker

Familiar: React, C, MIPS x32 Assembly, Google Cloud Platform, Amazon Web Services

Jarvis Projects

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

Cluster Monitor [GitHub]: Developed a Linux Cluster Monitoring system which is used for monitoring the hardware resource usages of each machine in a computer cluster. Implemented the app using Bash scripts and SQL. Tested the app using manual testing. Containerization of the PSQL environment was done using Docker, automation was done through crontab, and version control was done through Git.

SQL Query Practice [GitHub]: Implemented a collection of SQL queries to be run on a database holding information about club facilities, club members and booking information based on a set of requirements. Used various query techniques such as joins, aggregation, window functions and string manipulation. Tested the queries by running them on a local PostgreSQL database. Containerization of the PSQL environment was done using Docker and version control was done through Git.

Core Java Apps [GitHub]:

- **JDBC App:** Connected Java application code to a PostgreSQL database to interact with the data on the database using the JDBC API. Implemented create, read, update and delete operations using the DAO (Data Access Object) Repository design pattern. Tested the functionality through manual testing. Containerization of the PSQL environment was done using Docker and version control was done through Git.
- **Twitter App:** In progress
- **Grep App:** In progress

Highlighted Projects

Library Manager [GitHub]: Developed a full-stack library manager app using Javascript/Typescript frameworks such as Node.js/Express for the backend API and Angular for the frontend user interface. Contains create, read, update and delete functionalities for the library manager to add new books, search for books by a certain field, update the fields for a given book and delete a book from the library. Unit testing was done through Jest, end-to-end testing was done through Cypress.

Canadian Election Data Exploration [GitHub]: Performed SQL on Canadian election data to gain insight into how political donations affect the outcome of elections. Data was taken from Elections Canada and cleaned using Python. Implemented the schema and queries using SQL. Conclusions were drawn based on the results of the queries, which were carefully chosen to answer key questions about the data.

Professional Experiences

Part-time Office Worker, ItZact Solutions (2020 May - 2020 August): Designed the front-end user interface for the company website using Wix and communicated with the owner on their preferences. Assisted with installing Ethernet

cables in the ceiling for client companies.

Education

University of Toronto (2019-2023), Honours Bachelors of Science, Major in Mathematics, Minor in Computer Science and Statistics

Miscellaneous

- Played piano up to the ARCT level and was a part of the Arts Unionville (specialized in music) program in high school.