

Rae Khan . Jarvis Consulting

I have earned a Bachelor of Aerospace Engineering from Ryerson University. Throughout my academic career, I became proficient at MATLAB by continually programming for various school projects and assignments. Within the last several years, I have further honed my software skills by learning VBA and SQL. In addition, I have worked as a Full Stack Developer on various web applications, gaining additional skills in JavaScript React, HTML, and CSS. Previously, I worked as a Lead Robotics Instructor where I taught various students the basics of Lego Robotics, Python, and Scratch Programming. I was responsible for developing and distributing lesson plans, delegating tasks, and troubleshooting various issues. Moreover, I see myself as a mold for complex problems, I love working with large amounts of data, and challenging myself to find solutions. Software is an outlet for me to engage with these problems, employ creative results, and I am excited for upcoming opportunities to expand my software skills.

Skills

Proficient: Java, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git, MATLAB

Competent: JavaScript (React), Python (Pygame), HTML, CSS, VBA

Familiar: Ruby, React, JQuery, Ajax, Express

Jarvis Projects

Project source code: https://github.com/jarviscanada/jarvis_data_eng_RaeKhan

Cluster Monitor [GitHub]: Developed a Linux clustering monitoring agent for the purposes of collecting and analyzing data using PostgreSQL, Docker, crontab, and Bash. The agent was programmed using Bash and testing was done manually within a Docker container that uses a PostgreSQL Database. This was done via a CentOS virtual machine using Google Cloud Platform.

Core Java Apps [GitHub]:

- **JDBC App:** Developed a Java application with the use of the JDBC API to perform various queries. These include the use of the CRUD (create, read, update, delete) operations. A PostgreSQL database was provisioned using a Docker container. Testing was completed manually in IntelliJ and then verified via the database.
- **Grep App:** Coded a Java application that imitated the Linux grep command to search for a pattern recursively within a folder using IntelliJ Maven and Docker. IntelliJ Maven was used to package the project and it was distributed via Docker Hub.

Highlighted Projects

Fantasy Basketball Helper App [GitHub]: Programmed a web application using JavaScript React, HTML, CSS, Express, and PostgreSQL to allow users to see rich basketball data for their fantasy team to make more informed decisions. The front-end uses JavaScript React, the backend uses Express, and PostgreSQL is used for the database. Features include sourcing NBA data from SportsDataIo API, using fantasy stats that follow Yahoo Fantasy Sports, and various data representations from Vicory React.js.

Tweeter [GitHub]: Coded a Twitter clone to display short 140-character messages created using HTML, CSS, jQuery, Ajax, and Express. The front-end uses jQuery and Ajax while the backend uses Express. Features include the ability to write out various messages, tweet them, and view previous messages.

DinoDiscount [GitHub]: Collaborated on a full-stack web application designed to buy/sell items (dinosaurs), like Kijiji, created using EJS, JS, HTML, CSS, Express, and PostgreSQL. The front-end uses EJS, the backend uses Express, and PostgreSQL is used for the database. Features include being able to see different listings, individual listing information, the vendor's information, and the items being sold by the vendor.

Professional Experiences

Software Developer, Jarvis (2021-present): Responsible for working on various software projects including Linux, Bash, SQL, and Java. Followed the agile scrum methodology, attended daily scrum meetings, and worked as the team lead. Additionally, assisted colleagues with various technical issues.

Virtual Python Instructor, Geek Education (2021): Educated upwards of 25 students individually on the basics of Python, including various topics on syntax, functions, and variables. Passionately adapted lessons based on the needs of

the student, engaging in various subjects/games they were interested in. Used Google Classroom to ensure students were able to resolve issues regarding homework between classes.

Lead Robotics Instructor, Institute of Robotics and Intelligent Systems (2019-2021): Enthusiastically taught approximately 30 students over 12 weeks on various courses, including Basic Python, 3D Printing, Lego EV3 Robotics, and Lego Wedo Robotics. Updated parents on the performance of students as well as discussed issues. Tailored lesson plans to be more engaging for students. Publicly spoke and gave presentations about the work the company was doing.

Education

Lighthouse Labs (2021 - 2021), Full-stack Web Development Bootcamp Diploma, Web Development

Ryerson University (2014 - 2021), Bachelor of Aerospace Engineering, Aerospace Engineering

Miscellaneous

- edX Querying with T-SQL (2020)
- UdemY Excel VBA & Excel Macros (2020)
- LinkedIn Agile Software Development (2020)
- Volunteer, Ryerson Engineering Competition, Ryerson University
- Leader of Weekly Book Club