

Adrian Zaia . Jarvis Consulting

I graduated with Honours in Computer Science at Ryerson University in 2021. Throughout my time as an undergraduate, I was able to expand my knowledge in object-oriented programming languages through the courses offered by my university's curriculum and through extracurricular clubs that were focused on specific programming languages, or software, geared towards my interests. I was able to land a co-op job at RBC as an Operational Risk Analyst for the summer of 2018, which helped me gain a deeper insight into the inner workings of big companies and how the Agile Framework functions in a real-world setting. I recently joined Jarvis as a consultant to hone my skills in different programming fields outside of object-oriented programming and hope to show what I can do with my ideas and knowledge.

Skills

Proficient: Java, HTML, SQL, CSS, Agile/Scrum, Github, Visual Studio Code

Competent: C/C++, Python, C#, Javascript, Adobe Suite, IntelliJ, Linux/Bash

Familiar: Unity Game Engine, Unreal Game Engine, Git, Docker, Node.JS, React, OpenAI Universe

Jarvis Projects

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

Cluster Monitor [GitHub]: Designed an MVP (Minimum Viable Product) that monitors a Linux Cluster that tracks each specific node's hardware and resource usage in real-time and automatically persists data to a database. The application was implemented using Bash Scripts on a Linux CentOS 7 virtual machine, and the data collected is stored on a PostgreSQL database, provisioned by Docker, every minute through Crontab.

Core Java Apps [GitHub]:

- **Grep App:** Developed a Java application that functions similarly to the grep command in Linux. This application takes in a user inputted regex, searches for that same regex pattern in a given directory, and then outputs the lines, matching the input, to an output file. The app was written on Java 8 and made on Visual Studio Code.
- **JDBC:** In-Progress

Highlighted Projects

Video Game AI: Developed an AI agent, through the use of OpenAI's Universe Software and Python, to play a browser racing game. We imported Universe and Gym, a toolkit for comparing RL (Reinforcement Learning) algorithms. The game was hosted on a VNC server, this allows the bot to view the game environment and learn how the game functions and how to maneuver a race track. Then the Universe library allowed the AI Agent to function as a VNC client and give the AI the required controls to successfully complete a race track.

Discord Bot: Developed a bot for Discord through the use of Node.js and Javascript as a means to accomplish its assigned tasks such as grabbing an image with a specific Reddit tag or giving an alert about a webpage change. I built the bot to reply to a specified message posted in a chat, the message being "!meme", which triggers the Javascript code to parse through the given ArrayList of websites. The bot then chooses from hundreds of image results by using a Random Integer Generator then posts the image with the corresponding result. Another task the bot was responsible for, was to monitor a specific Livestream webpage and send an alert to everyone on a Discord server of any changes. I accomplished this by using IFTTT(If This Then That) API and integrating Webhooks into the bot. Then, once a person has begun streaming for the specified channel, the bot detects the change through the API and sends a message alert of the Livestream to a specified channel.

Professional Experiences

Software Developer, Jarvis (2021-present): Developing and implementing programs, such as the Java GREP app, using modern software and programming languages. I also work in an Agile & Scrum environment with my assigned team members. I am tasked with conducting daily Scrum meetings with my team and writing down notes on any new developments with my team's projects. We conduct Sprint meetings every two weeks to discuss what went right during the Sprint and look to what we will work on and how to work on it more efficiently than the previous project.

Operational Risk Analyst, RBC Royal Bank (May 2018 - August 2018): Handled and maintained IFRS9 data that was automatically recorded into multiple JDBC databases. I was able to access and edit the JDBC databases through

the use of the Squirrel SQL tool and write down any errors I encountered. Based on the errors I encountered, I made contact with the proper entities to discuss the accuracy of the data. I was also tasked with constantly checking a work email that employees of RBC would write to if they encountered an issue, and I would assist them through their problems.

Education

Ryerson University (2016-2021), Bachelor of Computer Sciences, Computer Science Department - Honours in Computer Science - Dean's List 2021

Miscellaneous

- Participated as a team of two in a robotics competition, I was working as the robot builder that would accomplish a specific task, such as an elevator. While my partner was the programmer for what the robot does through the use of C++. We placed in 2nd place across all participants.
- Worked as a DJ at a charity event, hosted by Toronto Police at Ripley's Aquarium. I was tasked with setting up the necessary equipment for the event and making sure the sound and electronics were in working order before the event began. I created a mix of music that was enjoyable for both kids and adults alike.