# Petar Kandic . Jarvis Consulting

I am an experienced software engineer who is eager to show what I know. My experience in developing applications has given me a significant understanding of languages such as Java and C, as well as commonly used technologies such as Linux and Git. While back-end development is my greatest strength, I also have experience designing front-end applications, using HTML/CSS, JavaScript, and Python. I have worked alone and as part of a team, using the Agile methodology to communicate with my coworkers and find solutions. Whenever new challenges arise, I am prepared to use what I know to overcome them.

#### Skills

Proficient: Java, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git, C Competent: HTML/CSS, JavaScript, Bootstrap, Python, Rust Familiar: Docker, AWS, Functional Languages/Elixir, C#, C++

## **Jarvis Projects**

Project source code: https://github.com/jarviscanada/jarvis data eng PetarKandic

Cluster Monitor [GitHub]: Developed a package of Bash scripts to monitor the status of a Linux system. These shell scripts allow users to monitor the status of all nodes in a Linux cluster. After a PostgreSQL instance is created in a Docker container, tables are created in the instance to store the node data. The hardware data and software usage data are then stored in the database. The software usage data is added persistently to the database, using the cron tool. The agent was tested in the command line, using the bash -x debugging command and the psql CLI to check the databases.

# **Highlighted Projects**

Tutoring Web Application [GitHub]: Designed and developed a tutoring application. Users explore a mock-up of a commercial web-application, navigating its pages and using the log-in system. HTML/CSS is used for the static elements, JavaScript is used for active elements (including windows which fade in), and SQL to store and retrieve log-in data. I used Mocha to test the log-in functionality, and manual testing for the rest of the application. The application runs on the local machine.

Java Car Dealership Simulator [GitHub]: Designed and programmed a car dealership simulator in Java. Users interact with the simulator to purchase cars, return them, and filter them based on factors such as their make and price. This project uses Core Java, and no other languages or frameworks were employed. I used unit testing, extensively testing every possible command. The application runs on the local machine.

#### Professional Experiences

Software Developer, Jarvis (2023-present): Programming applications in Bash and Java. One application is a Linux cluster monitoring agent, written in Bash. The agent allows a user to monitor the status of nodes within a cluster. A PostgreSQL instance in a Docker container is used to store the data, while cron is used to run the script every minute. Our team uses the Agile methodology. We hold daily scrum meetings, in which we discuss what projects we are working on, and what we plan to do next. These scrums allow us to understand how close we are to completing our objectives, and enable us to reach out to others if we need assistance.

Data Engineer, Fiix Software (2021): Developed a web scraping application with Python to gather the web usage data of our clients. The requests library was used to retrieve data, while pandas was used to transform data before storage. This application was then deployed over AWS, and executed at regular intervals using cron. Before the deployment, I also used AWS to test the application on sample databases. The scraper executed 35% faster than its predecessor. This enabled the company to process a larger amount of data than before, at a faster rate.

## Education

Toronto Metropolitan University (2018-2022), Bachelor of Sciences, Computer Science - Dean's List (2020, 2021) - GPA: 3.3/4.0

# Miscellaneous

- Organized a competitive soccer leagueCaptained several competitive basketball teams