Raihau Buillard-Richmond . Jarvis Consulting

As a software developer, graduated in software engineering and holding a Diploma of College Studies (DEC) in computer technology, I possess a strong technical expertise covering a wide range of technologies sought after in the market. With almost 2 years of professional experience, primarily focused on the C# language and the Microsoft ecosystem, I have developed my skills in web and software development. My academic background has provided me with a solid foundation in software engineering, while my diverse professional experiences have enabled me to acquire a rapid learning ability and a deep understanding of technical environments. With this experience, I am ready to take on new challenges and continue to progress in my professional career.

Skills

Proficient: C#, Java, Git, REST Api, Agile/Scrum

Competent: React, Linux/Bash, HTML/CSS, MSSQL, Docker, Postman/Insomnia/Swagger

Familiar: AWS/GCP, Python, TypeScript, RDBMS/SQL, Javascript, GraphQL, Terraform

Jarvis Projects

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

Cluster Monitor [GitHub]: Implemented data collection scripts using Bash to execute Linux commands, automating hardware and resource data retrieval. Configured PostgreSQL database within a Docker container to store collected data centrally. Created and managed Docker containers to ensure consistent and isolated database environments. Integrated the system with Git for version control and collaboration. Integrated Crontab scheduling for automated data collection (host_usage.sh), ensuring continuous updates of CPU and memory usage metrics. Deployed the Linux Cluster Monitoring Project, automating real-time hardware resource monitoring.

RDBMS and SQL [GitHub]: Developed expertise in normalization, data modeling, entity relationships, and fundamental database principles. Executed various SQL queries to enhance skills in data manipulation and retrieval. Acquired SQL skills and a deep understanding of both theoretical concepts and practical applications in database management.

Java Grep Application [GitHub]: Designed a Java application to replicate the functionality of the egrep command, enabling text filtering in .txt files based on regex patterns. Implemented Docker compatibility for seamless deployment and scalability of the application.. Addressed performance challenges by adopting streaming APIs for incremental file processing, ensuring optimal memory utilization. Developed grep app integrating Maven for dependency management and incorporated Java streams and lambdas for efficient data processing.

Java Stock Quote Application [GitHub]: Developed a console application to manage stock transactions, allowing users to buy and sell stocks and view real-time quote details. Integrated the Alpha Vantage API to fetch and display the latest stock quotes. Utilized PostgreSQL to persist stock transactions and maintain a history of bought stocks. Implemented database operations using JDBC for data retrieval and manipulation. Provided two approaches to deploy the application using a Dockerfile and a Docker Compose file for seamless deployment and scalability. Created unit and integration tests to ensure the reliability and accuracy of the application's functionality. Configured Docker to run PostgreSQL in a container and linked it with the application for persistent data storage.

Highlighted Projects

Web application for Ski Acro Québec: Evaluated client needs and defined tasks for a given period. Distributed tasks within the team and orchestrated daily meetings to monitor progress during iterations. Conceptualized the collected data to establish a foundational system that aligns with client needs (class diagram, sequence diagram, deployment diagram). Implemented microservices in a .NET environment to design a flexible platform. Designed an API to process all essential requests for platform operation. Managed data efficiently with Entity Framework within SQLite as well as MSSQL.

Github metric application: Set up a series of tasks in the 'Issues' section on GitHub and defined various 'Labels' to categorize each task. Created a project on GitHub using the Kanban methodology and ensured each task is positioned correctly within the Kanban board's columns. Configured actions in GitHub to automate the pipeline. Extracted project metrics from GitHub using GitHub's GraphQL API. Used the Hangfire library to schedule requests regularly. Stored the collected data in a NoSQL database such as MongoDB.

Professional Experiences

Software Developer, Jarvis (2024-present): Implemented a Linux cluster monitoring system to collect and analyze hardware specifications and resource usage for each machine in the cluster. Developed SQL skills through a comprehensive training project, mastering clauses, database management principles, and data manipulation techniques. Designed a Java-based grep application integrating Maven, Docker, and streaming APIs for efficient text filtering and deployment. Delivered a full-featured Java stock quote application, integrating API data retrieval and database management, and deployed using Docker for streamlined operations.

Software Developer, Genetec (May 2023 - August 2023): Shared ideas regarding the addition of features and analyzing the consequent needs during meetings. Reviewed unit and integration tests to comply with test coverage as per conventions. Optimized Security Center (Genetec product) by adding new functionalities. Used Azure DevOps to track tasks and manage project workflows. Guaranteed the proper operation of the product by resolving bugs of various complexities. Collaborated in Pair programming during innovation days to make improvements to the Genetec product.

AI developer, Intact (September 2022 - December 2022): Expanded API features by introducing new Endpoints. Implemented unit and integration tests to ensure code quality. Modified OpenApi files to reflect newly added Endpoints. Ensured the smooth operation of AWS services (like Amazon S3, Lambda, EC2) during modifications or additions. Developed functions via AWS Lambda. Updated Terraform scripts to align the cloud infrastructure with new requirements or to fix detected issues. Identified errors by examining logs through the Amazon CloudWatch service.

Software Developer, Sherweb (september 2021 - december 2021): Managed data with Entity Framework by integrating or modifying migrations. Added new Endpoints to a Rest API in .NET. Attended Product Backlog Refinements to estimate the complexity of user stories. Conducted code reviews within the team. Enhanced expertise by analyzing the work environment and learning new concepts such as DDD (Domain Driven Development).

Frontend developer, VifTélé (September 2020 - December 2020): Improved query performance to decrease web page load times. Validated web form data to guarantee its integrity. Attended the code's production deployment.

Backend developer, Umaknow (January 2019 - May 2019): Created and handled Word documents through programming. Developed services to extract platform-specific data from cloud platforms. Created 'Pull requests' within Azure DevOps for team validation. Participated in 'Planning poker' sessions to estimate task complexity. Analyzed APIs of cloud platforms (Microsoft Azure, Google Cloud, Amazon Web Services) to gather necessary information.

Education

École de technologie supérieure (2019-2023), Bachelor of Software engineering, Software Engineering

Cégep André-Laurendeau (2016-2019), DEC, Computer science

Miscellaneous

- Muay Thai : Respect for others, improving self-control, maintaining good physical and mental health.
- Climbing : Developing problem-solving skills, setting achievable and attainable goals.
- Hiking: Enhancing physical fitness, enjoying nature, developing perseverance and endurance.