John Kim . Jarvis Consulting

I am a recent graduate from the University of Guelph with a Bachelor of Computing in Computer Science. Currently, I work for Jarvis where I have collaborated within Agile teams, working on projects that combine my interests in software development, and leveraging data through efficient database management. Additionally, I have experience as a Full Stack Developer at PurchaseKorea LLC, where I utilized technologies such as Next.js, React, PayloadCMS, TypeScript, and MongoDB to build a scalable platform supporting high user web traffic. I love tackling new challenges and am passionate about continuous learning, which drives me to stay on top of emerging technologies. I believe that throughout my career, there will always be more to learn, but I am confident that my adaptability and dedication make me a valuable asset to any team.

Skills

Proficient: Python, TypeScript/JavaScript, Java, RDBMS/SQL, Docker, Linux/Bash, React, Agile/Scrum

Competent: CI/CD, PySpark, Pandas, MongoDB, NextJS, NodeJS, Maven

Familiar: AWS DynamoDB, DataBricks, Jupyter Notebook, Google Cloud Platform (GCP), Flask

Jarvis Projects

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

Jarvis Consultant Profile Viewer [GitHub]: Developed a proof of concept (POC) application for the Jarvis sales team to efficiently showcase consultant profiles to clients and hiring managers. Built with TypeScript, TailwindCSS, PayloadCMS, Next.js, and MongoDB hosted on AWS, the platform enables seamless consultant profile CRUD operations. Leveraged Vercel for deployment, ensuring a responsive and scalable user experience.

Cluster Monitor [GitHub]: Implemented a resource analytics tool to continuously record hardware and usage data, including CPU specifications, memory utilization, and disk I/O performance metrics. The Linux Cluster Monitoring agent can be used for a single machine but optimally would be hosted on multiple Linux nodes in a cluster. Each node would collect hardware and usage data via Bash scripts scheduled by a cronjob, storing the information in a shared PostgreSQL database hosted in a Docker container. The primary users of this tool are system administrators, DevOps engineers, and other IT professionals responsible for ensuring the efficiency of their server infrastructure.

Core Java Apps [GitHub]:

- JDBC App: The Stock Quote App is a tool that allows users to fetch real-time stock quotes, buy and sell stocks, and manage their stock portfolio. Developed in Java, it leverages JDBC for database interactions with PostgreSQL, OkHttp for HTTP requests to fetch stock data from the Alpha Vantage API, and SLF4J for logging. The app follows the DAO design pattern for data access and is built with Maven. It is packaged with Docker and can be easily deployed using Docker Compose, ensuring a consistent execution environment.
- Grep App: The Java Grep App is a command-line tool that mimics the grep command. It searches for regex patterns in text files within a specified directory and its subdirectories, outputting matched lines to a file. Developed in Java, it leverages core Java libraries for file I/O, regex matching, and logging with SLF4J. The app uses Stream APIs for memory efficiency and is built with Maven, packaged with Docker, and uploaded to Docker Hub for ease of use.

Highlighted Projects

DALL-E 3 Image Embedder CI/CD Action [GitHub]: Released a CI/CD GitHub Action on the marketplace, that automates the process of embedding AI-generated image elements into HTML files. Leveraged OpenAI's DALL-E 3 AI model to generate images from textual descriptions found within HTML comments and utilized BeautifulSoup in Python to parse HTML files, identify custom comments for image generation, and replace them with img tags. Finally, packaged the Bash and Python scripts within a Docker Container to ensure consistency and reliability across different execution environments.

UofG Docker/Kurbernetes Education Environments: Assisted Dr.McCuaig in creating Docker/ Kubernetes solutions to provide UofG CS courses with remote programming container environments. Presented a mechanism proposal to university system administrators, facilitating selection of preferred mechanisms for further development. Produced video step-by-step documentation to guide future students, teaching assistants, and instructors in using the container environments effectively.

Professional Experiences

Software Developer, Jarvis (2024-present): Collaborated within Agile/Scrum teams on diverse software and data-driven projects, participating in daily stand-ups, reviews, and sprints. Developed a Linux Cluster Monitoring Agent using Docker, Bash, and PostgreSQL to gather performance data, improving resource analytics. Utilized GitFlow for version control, ensuring consistency across remote repositories throughout the SDLC.

Full Stack Developer, PurchaseKorea LLC (2023-2024): Led the development of PurchaseKorea.com, achieving 10K+ monthly active users within the first six months of launch. Developed the e-commerce platform utilizing technologies such as Next.js, React, TRPC, TypeScript, Payload CMS, Tailwind, Express, React-Query, and more. Developed and managed the MongoDB database, ensuring efficient data storage and retrieval to achieve optimal cost per performance. Deployed Docker containers on Google Cloud Platform (GCP), running Node.js scripts to support application functionality. Coordinated with team members to align project sprint goals and timelines.

Education

University of Guelph (2019-2022), Honours Bachelor of Computing, Computer Science - Dean's List (2022)

Miscellaneous

- TFT Auto Chess - Reached top 100 NA (0.011% of player base) and played in multiple tournaments series with thousands of dollars in prize pools.
- Avid Kickboxer - Trained in Muay Thai and Kickboxing for 6 years.