Vishay Singh . Jarvis Consulting

Hello there! My name is Vishay Singh and I graduated from the University of Toronto with an Honours Bachelor's Degree of Science, majoring in Computer Science and French Studies. Since a young age, I've been fascinated by what technology can do to solve real world problems, which is exactly what I want to do in the software industry. In fact, learning new things is a passion of mine, so software provides the perfect avenue to continually challenge myself. This mindset lead to my projects at Jarvis, which includes a Linux/SQL server usage bot, a Java grep implementation & JDBC app, a Twitter CRD backend app, and a SpringBoot backend trading app. Before Jarvis, I was involved in different projects like a MERN stack web app, an RNN song lyric model, and a lecture on rootkits with respect to cybersecurity. In my spare time, I'm either building computers, playing video games, or learning guitar.

Skills

Proficient: Java, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git, Python, RESTful services, Docker, Spring/SpringBoot

Competent: C, JavaScript, Numpy, scikit-learn, Pandas, Pytorch, Matplotlib, JIRA, CI/CD, Maven, MongoDB, Neo4J, Swagger

Familiar: Racket & Haskell, R, Assembly, HTML, C++, Express.js, Node.js, React.js

Jarvis Projects

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

Cluster Monitor [GitHub]: Designed, implemented, tested, and deployed a Linux Cluster Monitoring Agent that allows businesses to monitor and find server nodes that are underperforming, resulting in optimized resource allocation for the entire cluster.

Core Java Apps [GitHub]:

- Twitter App: Designed, implemented, tested, and deployed a backend Java app that can CRD tweets using Twitter's REST API. Common design patterns & frameworks were leveraged to design this app, such as MVC architecture, DAOs, and Spring Dependency Injection. Implemented using HTTP client, core Java libraries, maven, and SpringBoot. Integration and Unit testing using JUnit and Mockito, resulted in a well-tested app published on DockerHub.
- JDBC App: Designed, implemented, tested, and deployed a Java app that uses the JDBC library, the DAO design pattern, a Docker PostgreSQL database, IntelliJ IDE, and DBeaver client to CRUD persisted sales data, resulting in atomic business-related queries.
- Grep App: Designed, implemented, tested, and deployed a Java implementation of the Linux grep command using features/libraries (like regex, lambda, Stream APIs, and JUnit), which recursively traverses file paths resulting in an output file with all matching strings.

Springboot App [GitHub]: Designed, implemented, tested, and deployed a backend trading app that can create and manage clients/accounts, and execute security orders on stocks defined by IEX Cloud's REST API. This app leverages three-tier architecture, microservices, and DAO design patterns. It was written with standard Java libraries, SpringBoot Inversion of Control, SwaggerUI, PostgreSQL external databases, Maven, and deployed using Docker.

Frontend/React [GitHub]: In progress.

Highlighted Projects

Google Developer Student Club Website [GitHub]: Designed, implemented, and tested an MVC architecture web application using the MERN stack (MongoDB, Express.js, React.js, Node.js) in a team of 6.

Deep Learning - RNN Lyric Generation Model [GitHub]: Designed, implemented, trained, and tested an RNN Generative Model to achieve a 58% test accuracy.

Information Security - Rootkit Lecture and Tutorial [GitHub]: Collaborated with a partner to create an in-depth presentation, lab, and assignment about rootkits that exploit the Linux LD_PRELOAD environment variable.

Professional Experiences

Software Engineer (Bilingual / Entry Level), Jarvis (2022-present): Designed, implemented, tested, and deployed software projects relating to Linux/Bash scripting, SQL, and Java, using Agile/Scrum methodology, Git Flow, and Docker.

Attended and passed Master Code Review meetings that certify acceptable code quality and requisite knowledge. Lead daily stand-up meetings during sprints, which coordinated and tracked scrum team progress.

Computer Technician, Freelance (2017-present): Constructed, tested, and overclocked custom PC hardware resulting in hundreds of prompt solutions for satisfied clients.

Education

University of Toronto, Mississauga (2018-2022), Honours Bachelor of Science (HBSc.), Mathematical and Computational Sciences - UTM Entrance Scholarship - University of Toronto Grants (UTAPS) 2019-2022 - CGPA: 3.27/4.0 - Final Year GPA: 3.71/4.0

Miscellaneous

- Beginner guitarist
- Competitive/casual gaming
- Recreational fitness
- Film/TV/literature analysis