# Jaskaran Dhillon . Jarvis Consulting

A recent Computer Engineering graduate from McMaster University with a passion for software development. Experienced in full-stack development, having worked for 1.7 years in internships using technologies such as React, TypeScript, Spring Boot, and PostgreSQL. Being able to solve real-world complex problems drives me to keep improving my craft in this industry, always seeking the next greater challenge.

#### Skills

Proficient: Java, JavaScript, HTML/CSS, React, ExpressJS, Agile/Scrum

Competent: Linux/Bash, Spring Boot, TypeScript, Linux, Jest, Git

Familiar: Docker, MongoDB, Python, Kafka, PostgreSQL

#### **Jarvis Projects**

Project source code: https://github.com/jarviscanada/jarvis\_data\_eng\_JaskaranDhillon

Linux Cluster Monitor [GitHub]: Developed a Linux monitoring agent which collects server hardware and resource usage metrics periodically. A quick and easy to use tool built using Bash, Docker, and PostgreSQL. Provides valuable information for cluster performance assessment and future resource allocation planning.

## Core Java Apps [GitHub]:

- Twitter App: Curabitur laoreet tristique leo, eget suscipit nisi. Sed in sodales ex. Maecenas vitae tincidunt dui, et eleifend quam.
- JDBC App: Curabitur laoreet tristique leo, eget suscipit nisi. Sed in sodales ex. Maecenas vitae tincidunt dui, et eleifend quam.
- Grep App: Curabitur laoreet tristique leo, eget suscipit nisi. Sed in sodales ex. Maecenas vitae tincidunt dui, et eleifend quam.

Springboot App [GitHub]: Not Started

Python Data Analytics [GitHub]: Not Started

Hadoop [GitHub]: Not StartedSpark [GitHub]: Not Started

Cloud/DevOps [GitHub]: Not Started

### **Highlighted Projects**

StudyAI [GitHub]: Led a capstone team in the development of an application designed to streamline note-taking processes, allowing users to input lecture notes and audio files, resulting in the generation of a comprehensive PDF summary. Developed a Python script using Prompt Engineering and OpenAI which provides summaries, definitions, and practice questions based on the provided input content. Designed the back-end API in MVC design pattern using Node.js, Express.js and PostgreSQL.

CommonTongue [GitHub]: Developed a live chat application integrated with the Azure Translator API to allow users to communicate with each other, irrespective of their language. Designed an elegant and responsive user interface in React using Material-UI. Wrote unit tests for the front-end using Jest and React Testing Library. Built microservices using Express.js, PostgreSQL, and WebSockets to handle user authentication and communication.

#### Professional Experiences

Software Developer, Jarvis (June 2024-present): Developing applications using Sprint Boot, Java, Linux, Docker.

Software Engineer Intern, Canada Life (May 2023 - August 2023): Designed and implemented new microservices using Spring Boot, MongoDB, and Kafka to serve as reference implementations for new developers. Enhanced the Azure Search OpenAI application using React, Python, and Flask to improve functionality and integrate it into Canada Life services. Developed multiple Spring Boot applications demonstrating Kafka error handling patterns to standardize designs across multiple teams.

Software Engineer Intern, Sera4 (May 2021 - August 2022): Architected and implemented a new user portal in React and TypeScript, used by 10,000+ enterprise users. Developed internal tools aimed at optimizing team workflows, resulting in efficiency gains of up to 30%. Wrote automated unit and integration tests for components with 90%+ code coverage using Jest and React Testing Library. Extended existing RESTful API microservices with new features using Express.js and PostgreSQL.

## Education

McMaster University (2018-2024), Bachelor of Engineering, Computer Engineering

#### Miscellaneous

- Interested in 3D animations as a hobby, developing small projects in my free time.
- Hackathon enthusiast, participated in HTN 2021, Hack The 6IX 2023, and UOttaHack 4.