

# Gagan Deep Singh

437-733-0070 | [gagandeepcorp@gmail.com](mailto:gagandeepcorp@gmail.com) | [LinkedIn: Gagan Deep Singh](#) | [GitHub: gagandeepsingh97](#)

## EDUCATION

**Western University**, London, ON  
UPES, Dehradun, India

**M.Eng. Software Engineering** (CGPA - 4.0/4.0)  
**B.Tech. Computer Science and Engineering**

Sept 2023 – Aug 2024  
Sept 2016 – May 2020

## SKILLS

- **Fundamentals** : Data Structures and Algorithms, OOPs, System Design, Rest APIs, Database Management, Micro services, Monolithic, System Design(HLD, LLD)
- **Frontend Tech Stack** : HTML, CSS, JavaScript, React
- **Backend Tech Stack** : Spring Boot, JPA, Hibernate, Spring Cloud, API gateway, NodeJs, Express, HashiCorp Vault
- **Libraries/Tools** : Docker, Kubernetes, Log4J, Kafka, Swagger, CI/CD Pipeline
- **Databases** : MySQL, MongoDB, PostgreSQL
- **Testing Libraries/Frameworks** : Junit, Mockito, Integration testing, Unit testing
- **Languages/Tools** : C, C++, Core Java, JavaScript, Python, Postman, ReadyAPI, GitHub, GitHub Actions, Bitbucket, Bamboo, Agile, JIRA
- **Cloud** : GCP(Kubernetes Engine, Cloud SQL, IAM, Cloud Build, Artifact Registry, Monitoring, Logging), AWS

## EXPERIENCE

**LTIMindtree**, Pune, India

**Senior Software Engineer**

June 2021 – Aug 2023

- Designed and implemented a **Spring Batch application** to automate the management of Call Interaction Policies in Genesys Cloud for the Customer Contact Center. Integrated the batch process asynchronously with a **Pub-Sub model** common messaging platform to update call recordings based on multiple factors, **reducing process time by 30%**.
- Developed a **REST application** that significantly enhanced customer experience by enabling seamless account PIN verification and updates via call, empowering customers to effortlessly access vital information such as balance checks and policy details, thereby **reducing agent call volume by 20%**.
- Migrated repositories from BitBucket to GitHub and deployment pipelines from Bamboo to GitHub Actions, streamlining the **CI/CD** process and enhancing workflow efficiency. Additionally, integrated **Hashicorp Vault** for storing encryption passwords, **increasing security**.

**Software Engineer**

June 2020 - June 2021

- Worked as a member of the **backend development team**, developed and maintained end-to-end applications, managed Infrastructure as Code (IaC) and backend services, conducted JUnit and Integration testing, and designed new features to enhance performance and user experience for **Principal Financial Group**, a global financial investment management and insurance company.
- Promoted to **Senior Software Engineer within one year** due to exceptional performance, significantly ahead of the average promotion timeline of 2 to 3 years.

## PROJECTS

- **To Do App Deployment** | DevOps, Kubernetes, Google Cloud Platform, Docker [Link](#) April 2024  
Engineered and managed a **Kubernetes-based CI/CD pipeline** for deploying a scalable web application on GCP, utilizing Docker, GitHub, and Cloud Build for automated workflows. Created development and production environments in a multi-node setup, with multiple pods for high availability, MongoDB database, and a load balancer to distribute incoming traffic.
- **Online Bookstore** | Full Stack - React, Node.js, Express.js, MongoDB [Link](#) Dec 2023  
Developed an online bookstore **e-commerce platform**, featuring user authentication, shopping cart, advanced book discovery via Google Books API, secure payment integration using Stripe, and an administrative dashboard, and deployed it online using AWS.
- **Online Examination System** | Java, Angular 8, Spring Boot, Hibernate, MySQL database [Link](#) Aug 2020  
Built a platform where students can take exams in various subjects at different difficulty levels. Admins can add questions and view student reports based on factors such as city, subject, and marks.
- **Oriflame Augmented Catalogue** | Augmented Reality, Unity, C# [Link](#) June 2018  
Created an app demonstrating the use of **AR** in Oriflame's catalogue, bridging the gap between print publications and online store.

## PUBLICATIONS

- **An Efficient and Secured Data Sharing Approach Through Image Transmission** [IEEE-ESCI](#) Mar 2021  
This research paper presents a two-layered security method for data hiding by combining **Steganography and Visual Cryptography**. Received **Best Paper** of the Session award.
- **A Data Visualization Approach for Predicting the Income Class of Population** [IEEE-ICECA](#) Dec 2021  
This research paper analyzes and predicts income classes using **regression techniques** and correlation coefficients, with findings represented through **data visualization**.