

Gagan Raj Singh

[Github/GaganRajSingh](#) | [Linkedin/gagan-raj-singh](#) | [www.gaganrajsingh.com](#) | grsingh@ualberta.ca

SKILLS

- **Programming** : TypeScript, C#, JavaScript, Python, SQL, C/C++
- **Web Development** : ReactJS, .NET, NodeJS, Redux, REST APIs, Entity Framework, SQL Server
- **Miscellaneous** : Data Structures, Git, Azure DevOps (CI/CD), LINQ, Agile Methodology

WORK EXPERIENCE

BGC Engineering

Jan 2024 - Present

Software Development Intern

Vancouver, BC

- **Enabled 1000+ civil engineers** to monitor inspections of their sites, by developing Inspections dashboard with multiple widget components, global filtering and sorting features using **ReactJS, TypeScript and C#**.
- Reduced developers' workload by about **20 hours per sprint** by developing **REST APIs** and designing **DB Schema** for an admin console which enabled admins to directly manage client features and layer configurations.
- Improved UX as seen by **80% reduction in time** in accessing layer metadata by developing **React Components, REST APIs, and DB schema** to implement a metadata popup feature.
- **Technologies** - ReactJS, TypeScript, .NET, C#, LINQ, Entity Framework, Redux, SQL, Git, Agile

Accountium

May 2023 - Dec 2023

Software Development Co-op

Vancouver, BC (Remote)

- **Boosted customer base by 25%** by optimizing the frontend using **ReactJS, JavaScript**, enhancing the user experience and making it fully compatible across multiple browsers and mobile devices.
- **Achieved 20% reduction** in client project delays by developing a Project Management feature, incorporating **Frontend, API development and DB modeling** using **ReactJS, C#**, which simplified progress tracking and invoice generation.
- Developed a Work Scheduling feature, **benefiting 50+ clients** by enabling them to create employee schedules, monitor work hours, and validate locations, by developing Stored Procedures, **REST APIs**, and designing database.
- **Technologies** - ReactJS, JavaScript, C#, .NET Core, MVC, REST APIs, SQL, Git, Agile

University of Alberta

Jan 2023 - April 2023

Graduate Research Assistant

Edmonton, AB

- Responsible for **leading a team of 3 members**, aimed at helping an executive search firm find better clients in less time, by using Machine Learning techniques.
- Improved the process of selecting the top potential clients from leads, as seen by an **increase in client count by 20%**, by developing, training and utilizing regression models to predict the success rate for each lead.
- **Technologies** - Python, Pandas, PyCaret, Scikit-Learn.

Deloitte

Aug 2020 - Aug 2022

Software Developer

India

- Ramped up the **user acquisition rate from 9% to 15%** for all the supermarket chains under Sobeys Inc., by developing user onboarding and account management webpages using **ReactJS, NodeJS** and **JavaScript**.
- Enhanced the security of the websites, by building **REST APIs** to implement **SSO** and email-based **MFA**, with device change and location change triggers.
- Led the successful migration of **4.5 million records** to a new database by developing the entire migration pipeline using **Python**.
- **Technologies** - ReactJS, NodeJS, ExpressJS, JavaScript, Python, SQL, REST APIs, Git, Agile

PROJECTS

Talk-2-PDFs

[Demo](#) | [Link](#)

- A web application that leverages LLM and GenAI to allow users to upload multiple PDFs and turn them into chatbots, enabling users to interact with their documents by chatting with them.
- **Technologies** - React, TypeScript, LangChain, OpenAI, Python, Flask, Redux, Git.

NFT Marketplace

[Demo](#) | [Link](#)

- Developed a web application, allowing users to generate AI images using textual prompts and mint them as NFT on blockchain. It enables users to generate, buy, sell and track the NFT ownership and its market value.
- **Technologies** - ReactJS, NodeJS, EtherJS, Solidity, OpenAI DALL-E 2, IPFS, Git.

EDUCATION

University of Alberta

Sep 2022 – Dec 2023

Master of Science in Computing Science

Edmonton, AB

Panjab University

July 2016 – May 2020

Bachelor of Engineering in Computer Science

India