Gagan Raj Singh

GaganRajSingh | gagan-raj-singh | Portfolio | grsingh@ualberta.ca | Leetcode

Education

2022 - present Master of Science (Computing Science) at **University of Alberta**
2016 - 2020 Bachelor of Engineering (Computer Science) at **Panjab University**

Skills

Programming	C#, C++, Python, JavaScript, SQL
Web Development	HTML, CSS, NodeJS, Express, ReactJS, MongoDB, MySQL, ASP.NET Core
Fundamentals	Data Structures, Algorithms, OOP, Computer Networks
Miscellaneous	Git, Github, Azure DevOps, Linux, Jira, Kubernetes

Work Experience

Software Engineer Intern at Accountium May 2023 - Present

- Actively contributing as a full-stack developer to a dynamic accounting web application, currently serving over 50 small businesses with critical features.
- Utilized C#, ASP.NET Core, and Microsoft Azure to develop an efficient Work Scheduling module, allowing customer companies to create and manage employee schedules.
- Led the development of a project management module, facilitating project progress tracking and invoicing processes for customer companies.

Graduate Research Assistant at University of Alberta Jan 2023 - April 2023

- Developed an efficient market penetration engine for an executive search firm, resulting in client search time reduction by almost 70%.
- Developed and fine-tuned predictive models to output potential client success rates, using Python, Pandas, Scikit-learn, leading to better decision making and business growth.

Software Developer at Deloitte Aug 2020 - Aug 2022

- Developed user onboarding and profile management webpages for 12 web and 4 mobile applications using JavaScript, jQuery, and NodeJS, with a daily user base of over 50,000.
- Utilized Kubernetes to deploy and manage the containerized applications, ensuring scalability and efficient resource utilization.
- Led the successful migration of more than 4.5 million user records to a new database by developing Python migration scripts, ensuring data integrity.

Projects

NFT Marketplace Link

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

Anomaly Detection System Link

- Designed a highly-efficient method to detect anomalies in surveillance videos using background subtraction technique, resulting in reducing the overall time by up-to 91%.
- Technologies used: Deep learning, Object detection, Python, PyTorch.