

# JOSEPH AGARWAL

## COMPUTER SCIENCE AND BUSINESS

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### SKILLS

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**Languages:** C#, C++, C, Java, JavaScript, Python, SQL, HTML/CSS

**Frameworks/Tools:** React, ASP.NET Core, Git, Postman, Swagger

### EDUCATION

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September 2020 - May 2025

**University of British Columbia:** Sauder School of Business

**Specialization:** Combined Major in Business and Computer Science, *Deans Honor List*

### EXPERIENCE

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**Cascade Aerospace – Full Stack Developer Intern**

September 2022 - May 2023

- Architected aeronautical planning application, constructing both server-side and client-side **REST APIs** with **ASP.NET Core**, saving scheduling department **20 hours weekly**
- Using **C#**, and **SQL**, implemented backend to transfer data to both Epicor and custom databases with Entity Framework, sending and tracking **100,000+ entries** with a **100% increase in efficiency** from existing designs
- Utilizing **Razor** and **JavaScript**, engineered a feature-rich Gantt Chart with **DevExpress**, employing data binding, task hierarchy, and critical path analysis

**Powerex Corporation - Software Developer Intern**

May 2023 - August 2023

- Constructed a timesheet reconciliation app using **C#** and **Gembox** to validate and translate spreadsheet data based on complex mapping specifications, reducing resourcing time **from 2 hours to ~2 seconds**
- Led successful migration of financial application frontend from **Angular.js** to **React.js**, resulting in improved performance, code maintainability, and **reducing rendering time by 30%**
- Built a SPP **data downloader API** with certificate authentication and logging, and report builder to systematically populate databases and generate custom **SSRS reports** on real time energy transmission data

### PROJECTS

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#### Visual Ai.d

- Developed a storyboarding app which transforms large text input by systematically summarizing paragraphs and generating customized images, utilizing OpenAI's DaVinci and Dall-e APIs
- Created REST API with Flask to manage prompts, translating data through 4 separate endpoints
- Designed interactive frontend with React to display storyboarded images in separate tabs, retaining order for clear visualization

#### Language Exchange

- Designed a webapp which matches users learning a language with native speakers, constructed with a React frontend and JavaScript backend
- Implemented logic to save user information using Google Firebase Realtime for persistent data store