## Joao Correa

### Education

#### **Simon Fraser University - BASc Computer Science**

Jan 2020 - Aug 2025

· Algorithms, Data Structures, OOP, Web Development, Databases, Probability, Statistics, Linear Algebra, SDLC

### Work Experience \_\_\_

### Software Engineer | AI LLM | Django | Rest API | PostgreSQL | Waterfall SDLC

Jan 2025 - Apr 2025

Providence Health Care - CDM

- Reduced costs by 100% by deploying a local LLM to handle medical inquiries, ensuring faster processing times and data privacy. This enhanced user experience, providing security of data and fast responses
- Increased response speed by 40% and user convenienceby implementing text-to-speech and speech-to-text features, with streaming capabilities for real-time responses, ensuring accessibility and engagement for users
- Improved system performance and security through the integration of a REST API in Django, connecting a PostgreSQL backend to a React frontend, organizing data flow, and enabling real-time communication for the full project stack
- Enhanced project delivery by implementing Waterfall SDLC, conducting weekly client meetings for approvals, doing user research and tests to ensure alignment with expectations, and enhancing overall user satisfaction

# **Developer Intern | Testing | Debugging | CI/CD | Agile methodologies** Proa.Al

May 2024 - Dec 2024

- Increased system efficiency by 62% by automating chatbot management, identifying patterns to improve AI accuracy and minimize manual interventions, utilizing OpenAI model to monitor performance, and analyze response times
- Leveraged IBM Watson and backend enhancements to improve intent recognition, Natural Language Understanding (NLU),
  and dialog management
- Boosted system reliability by 30% through automated E2E testing, identifying potential failure points, simulation of real-world scenarios, and implementing debugging strategies to ensure production stability

# Full Stack Developer | JavaScript | React - https://github.com/joaoishida/CourseCompass SFU Surge

Oct 2023 - Dec 2024

- Reduced data recovery time by 30% by creating a serverless Rest API to manage diverse information such as course evaluations, user authentication, and professor details
- Optimized a responsive UI and conducted user research for a better UX across devices, developing a web application using Next.js, React, and ensuring accessibility to help students plan their graduation
- Led the project to become a finalist in the Coast Capital Venture Prize (Chang Institute), collaborating with a team and designing a business plan for the project
- Improved system performance and scalability by implementing a MongoDB database to query data in under 1 second, while storing and retrieving over 10k course-related data

### **Projects**\_

### Restaurant Rating Interface | SQL | Python - https://github.com/Joaolshida/SQL\_YELP

Oct 2023 - Nov 2023

- Developed an intuitive Yelp-like database system with SQL and Python, implementing hierarchical navigation for seamless user interaction
- Guaranteed data consistency and reliability by crafting a robust backend system with SQL support, carefully constructing triggers to validate data integrity

#### Fifteen Puzzle Game and AI Solver | Algorithms | Java

Jan 2023 - Apr 2023

- Enhanced the puzzle-solving capabilities of an AI, integrating a variety of heuristic search strategies for a fifteen puzzle game using Java for terminal-based gameplay
- Reduced search time by 80% by implementing search algorithms and a system with A\* and IDA (Iterative Deepening A) search

### Skills\_

Programming: Java, C/C++, Python, SQL, NoSQL, CSS, JavaScript, HTML, TypeScript, Kotlin

Frameworks: React, Next, MongoDB, Django, Rest AP

Developer Tools: Git/Github, Docker, Tailwind, Venv, Linux, Vercel, Azure, Postman, Jetpack Compose, Android Studio