

Jacob Lavell

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<https://jacoblavell.github.io/>

Education

Honours Bachelor of Science – Computer Science

September 2018 – July 2023

Brock University, St. Catharines, Ontario

Academic History

- Worked with a team of four other students using scrum methodology to develop a responsive museum map for the Niagara on the Lake Museum.

Work Experience

Web Developer

June – August 2022

ALPHA Education

- Designed and developed interactive React-based pages to educate users about historical events from WW2.

Web Developer

May – August 2021

Rivvi

- Converted existing webpages from JavaScript to TypeScript, enhancing code readability and maintainability.
- Designed and implemented a scheduling page integrated with Firebase.

Technical Competencies

- Programming Languages: Java, Python
- Web Development: HTML, CSS, JavaScript, TypeScript, Ajax, React
- Databases: SQL, PostgreSQL, Firebase
- Tools & Technologies: Android Studio, Blender, GitHub
- Microsoft Office Suite: Word, Excel, PowerPoint, Outlook

Academic Projects

Brock University

COSC 2P03 – Advanced Data Structures

- Implemented trees, graphs, heaps, and hashes in Java programs.

COSC 2P89 – Internet Technologies

- Designed and developed interactive websites using HTML, CSS, JavaScript, Python, and Ajax.

COSC 3P32 – Introduction to Database Systems

- Created ER diagrams, executed SQL queries, and utilized PostgreSQL for database management.

COSC 3P71 – Introduction to Artificial Intelligence

- Applied neural network machine learning to solve complex problems.

COSC 3P91 – Advanced Object-Oriented Programming

- Developed GUIs and client-server connections using Java.

COSC 3P97 – Mobile Computing

- Built Android apps with Android Studio and used the Google Places API for location-based services.

COSC 3P98 – Computer Graphics

- Explored 2D and 3D graphics, lighting, and real-time interfaces using OpenGL, culminating in a 3D animation project.

COSC 4P01 – Software Engineering 1

- Learned agile and scrum methodologies, software requirements elicitation, software design and analysis design patterns, software testing, and software maintenance.