

# Thomas Britnell

SOFTWARE ENGINEERING RECENT GRADUATE

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## Summary

- Software Engineering Recent Graduate with technical and interpersonal skills proven through course work and a year long co-op position.
- Extensive **Object-Oriented programming** experience with **C#, Java, C++**, and **Python** through various work and academic experiences.
- Strong **collaboration** and **communication** skills gained through driving various academic and work related projects.

## Education

### McMaster University

Hamilton, ON

BACHELOR OF ENGINEERING - SOFTWARE ENGINEERING (CO-OP)

2017 – 2022

- 3.8 GPA
- Summa Cum Laude
- McMaster President's Award 2017
- McMaster Badminton Club Member 2017 – 2022
- Relevant Course Work: **Databases, Data Structures & Algorithms, Digital Systems & Interfacing, Operating Systems, Concurrent Programming**, Principles of Programming, Software Testing, Software Project Management, Software Design, Computer Architecture, Computer Graphics, Human Computer Interfaces, Probability & Statistics for Engineering, Discrete Math

## Work Experience

### Adlib Software

Burlington, ON

SOFTWARE ENGINEER INTERN

January 2020 – December 2020

- Followed Agile methodology, leveraging C#, SQL, and Visual Studio XAML workflows to implement new features for enterprise software serving high-profile corporate clients.
  - Worked directly with the AI team to integrate document identification and classification features into the product.
  - Completed QA regression testing using both manual and automated methods to ensure that developed features were up to strict quality standards.
  - Successfully used Azure for version control software while contributing to a large code-base with many branches, versions, and builds.
- Languages/Tools:** C#, Azure DevOps Server, Visual Studio, .Net, Microsoft SQL Server Management Studio, Selenium

## Projects

### Modular Game Collection

Remote

McMASTER UNIVERSITY

January 2022

- Using model view control (MVC) architecture, created a minigame as part of a larger 'escape room' themed collection of games.
  - Fully documented the design and implementation using latex.
- Languages/Tools:** Python, Pygame, Visual Studio Code, Latex

### "BrickBuilder"

Remote

McMASTER UNIVERSITY

December 2021

- Created a fully modularized 'LEGO' style brick modeling application, using matrix calculations to allow for transformations, rotations, and translations of the bricks in 3D space.
  - Included lighting, material rendering, and ray tracing for brick selection.
  - Wrote rigorous unit, system, and acceptance testing procedures to ensure function and quality were maintained after numerous updates and changes.
- Languages/Tools:** C++, FreeGlut, OpenGL, Visual Studio Code, GitLab

### "Minimo"

Remote

McMASTER UNIVERSITY

January 2021

- Worked with a team on an open source Google Chrome extension that replaces the homepage.
  - Cleaned up and modularized the whole code-base
  - added voice control support using anyyang API, a todo list, clock and localized weather using the OpenWeather API.
  - Improved the app in several tangible ways for development, including code re-usability and readability.
  - Enhanced the user experience by increasing accessibility for the visually impaired.
- Languages/Tools:** JavaScript, node.js

## Tool Kit

**Key** Strong | Intermediate

**Languages** Python, C#, Java, C++, SQL, Javascript, C, Matlab, html, css

**Tools** Git, Latex, Azure, Pygame, OpenGL, Matlab Simulink, DB2, .Net, node.js, express.js, MongoDB

**Environments** Visual Studio, Eclipse, Jupyter, Microsoft SQL Management Studio