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*

- Developed new features for enterprise software serving high-profile corporate clients using Agile methodology, C, SQL, and Visual Studio XAML workflows.
- Collaborated with the AI team to integrate document identification and classification features into the product.
- Conducted QA regression testing using manual and automated methods to ensure high-quality standards were met.
- Utilized Azure for version control software and contributed to a large code-base with multiple branches, versions, and builds.
  Languages/Tools: C#, Azure DevOps Server, Visual Studio, .Net, Microsoft SQL Server Management Studio, Selenium

Projects

Library Database   *Remote*

PERSONAL PROJECT   *January 2023*

- Created a web application similar to what might be used by a library to keep track of books, authors, copies, etc.
- Supports CRUD (Create, Read, Update, and Delete) operations interacting with a MongoDB database.
- Deployed to production using Railway.
  Languages/Tools: JavaScript, Node.js, Express.js, Pug (jade), Railway, MongoDB

"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 annyang 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, css, html

Tool Kit

Key	**Strong** | Intermediate
Languages	**Python, C#, Java, C++, SQL, Javascript, html, css**, C, Matlab, Golang
Tools/Frameworks	**Git, Latex**, Pygame, OpenGL, Matlab Simulink, DB2, .NET, node.js, express.js, MongoDB
Environments	**Visual Studio, Eclipse**, Jupyter, Microsoft SQL Management Studio