

# Zifan Si

416-616-8568 | [siz@mcmaster.ca](mailto:siz@mcmaster.ca) | [github.com/ZifanSi](https://github.com/ZifanSi) | [linkedin.com/in/zifansi](https://linkedin.com/in/zifansi)

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## HIGHLIGHTS OF QUALIFICATIONS

- Enrolled in level 2 of the 4-year Software Engineering Co-op program
- Developed excellent technical skills through academic and personal projects
- Strengthened analytical and problem-solving abilities to identify problems and implement corrective solutions using fundamental engineering techniques acquired through course and project work

## EDUCATION

**B.Eng** | Software Engineering (Co-op)

McMaster University | Hamilton, Ontario

(Expected) 2021 – 2025

- Achieved a GPA of **3.9/4.0** as well as the **Dean's Excellence Award**

### Relevant Courses:

- Object-Oriented Programming
- Software Engineering Practice and Experience: Development Basics
- Introduction to Software Development
- Data Structures and Algorithms
- Computer Architecture
- Discrete Mathematics with Applications
- Digital Systems and Interfacing

## SKILLS

- **Languages:** Java, C/C++, Python, HTML/CSS, SQL, Verilog, MATLAB
- **Tools:** Vim, Make, Linux, Git, Bash, GitHub, Latex, Microsoft Office
- **Design:** Autodesk Inventor, 3D Printing, Raspberry Pi

## PROJECTS

**Island Generator** | [zifansi.github.io/projects/IslandGenerator](https://zifansi.github.io/projects/IslandGenerator)

Apr 2023

- Awarded by McMaster Faculty of Engineering among all teams
- Created a **Java** project for generating and visualizing islands with different geographical features
- Used **Apache Commons CLI**, **Log4J**, **Junit** and **SonarQube** to test and refine

**Personal Website** | [zifansi.github.io](https://zifansi.github.io)

Jul 2022

- Developed a static website to visualize **Java** games, interactive applications, tech blogs
- Used **Git** for automatic build and deployment

**Hopper Dispensing Mechanism** | [zifansi.github.io/projects/p3](https://zifansi.github.io/projects/p3)

Jan 2022

- Created 4+ unique designs of possible mechanism to operate a recycling dispenser
- Prepared G-code for **3D printing** to test prototypes and discover area for improvement
- Confirmed accuracy of 3D model in **Autodesk Inventor** to professionally document design

**Autoclave Sorting Program** | [zifansi.github.io/projects/p2](https://zifansi.github.io/projects/p2)

Oct 2021

- Developed a program to control movement of a robotic arm and opening/closing of its gripper
- Sorted 6 sterilization autoclave locations using **Python** and **Raspberry Pi**
- Achieved a success rate of 100% in accurately sorting containers