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GitHub: <https://github.com/szge>

(647) 395-8638

## EDUCATION

### University of Toronto, St. George Campus - *HBSc Computer Science and Mathematics*

September 2019 - Present

- 3.9 in-major GPA
- First year: Calculus (A), Linear Algebra (A), Intro. to CS (A)
- Second year: Computer Organization (A+), Abstract Mathematics (A+), Software Design (B)
- Third year: Software Engineering (A-), Computer Graphics (A-), Algorithm Design (A-)

## WORK EXPERIENCE

### Improve the News Foundation - *Software Engineer/Researcher*

May 2022 - August 2022 (Current)

- Worked under supervision of MIT professor Max Tegmark to create an attractive dashboard (React, Node, PIXIJS) to help users visualize and interact with the daily news
- Collaborated with product designers and backend developers in an agile team
- Will transition into improving machine learning models once current project is complete

### Digital Leisure Inc. - *Game Developer*

May 2021 - August 2021

- Independently created three 3D multiplayer minigames for an upcoming title
- Created and debugged a C++ backend, refactored existing C# Unity minigame system

## PROJECTS

(full portfolio at <https://szge.github.io>)

**0 Barriers Accessibility Extension.** Our CSC301 group partnered with 0 Barriers Foundation to create a Chrome accessibility extension. I worked on generating a PDF report of accessibility issues for a given website, and created an API to fetch the issues from the backend.

**CS:GO Cheat.** Fully functional external cheat for the video game CS:GO. Implemented through direct memory read/write from the Windows API in C++. (Not tested against real people!)

**Mortal Coil Solver.** Automatic solver for [www.hacker.org/coil](http://www.hacker.org/coil). Used the Requests Python library to interface with webpages. Employed statistical methods and recursion. Top 10% of solvers.

## SKILLS

Programming languages - (*proficient*): TS/JS, Python, C++, C#, (*familiar*): Java

Applied skills (in order of proficiency): Git, HTML/CSS, React, Node, Unity, Plastic, R, MongoDB

## MISCELLANEOUS

- Founding Co-President of Trinity College Taiwanese Club
- Lagrange mathematics competition Canadian champion
- 15+ national awards in high school math and chemistry competitions