

Qi Shu

3B Honours Computer Science and Business Administration Double Degree

Expected Graduation Date: April 2021

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Skills

- Languages: C++/C, Java, Scheme, JavaScript, HTML/CSS, Python, Bash, SQL, VBA
- Library/Framework: jQuery, WebGL, Three.js, d3.js, React, Node.js, NumPy
- Tools: Git, Linux/Unix, Xcode, MacOS, Android, iOS

Work Experience

Research Assistant

Human-Computer Interaction Lab – the University of Waterloo

May 2017 - Present

- Built an online crowdsourcing platform based on Node.js
- Parsed data with Python for analysis in NumPy to discover a more efficient online crowdsourcing strategy which is mutually beneficial to both parties

Web Developer

Ontario Investment Office – Toronto, ON

Jan 2018 – Apr 2018

- Visualized relevant data on office website in an interactive way using d3.js and highchart.js libraries
- Created JavaScript widgets such as a responsive table of content for office website to improve its functionality and user experience
- Designed web-based graphics with WebGL and Three.js to enhance user interface

Teaching Assistant

Mathematics Faculty - the University of Waterloo

Sep 2017 - Dec 2017

- Marked weekly assignments and tests, and provide feedbacks to students
- Enhanced teamwork skills through group communication to ensure assignments were marked fairly

Notable Projects

3D Interactive Earth

- Built a WebGL-based 3D Earth Model displaying Ontario's investment connections with the world
- Developed clickable CSS-based 2D location points to follow 3D Earth movement pattern, with 3D projectiles connecting points to showcase Ontario's investment relations with other countries.

Tetris Game

- Established the Tetris game with C++ as a class project and attained a score of 99.8%
- Adopted Observer, Model-View-Controller and Template Method Design Patterns

Sunburst Data Visualization

- Built a responsive sunburst diagram based on JavaScript, which extracts data from HTML tables and renders through d3.js

Sum to Target Mobile Game

- Utilized React Native library to develop an iOS/Android game application which has multiple levels of difficulties and respective user interfaces

Awards

1st place in Women Empowerment Category in Equithon

May 5th 2017 – May 7th 2017

- Built website-based childcare service platform iCare, with HTML widget with input boxes which can display, store and process information

Education

University of Waterloo, Waterloo, ON, Canada

Sep 2016- Present

- Honours Computer Science and Business Administration Double Degree, Co-op Program