Joshua Cheng

Website: chengjoshua.com
LinkedIn: joshua-cheng | **GitHub:** github.com/JoshuaC15
Email: josh510cheng@gmail.com

EDUCATION

University of Waterloo   **Waterloo, ON**
Bachelor of Science Engineering, Software Engineering   *September 2019 – April 2024*

Honors and Achievements: Presidents Scholarship of Distinction, Halton Proficiency Award

TECHNICAL SKILLS

Most proficient: **Python, C++, C, HTML5/CSS**

Experience with: **JavaScript, C#, Flask**

Software: **Git, Unity3D, Processing, PyCharm, CLion, VSCode, Office Suite**

TECHNICAL PROJECTS

Heat Source Mapping Drone   **Waterloo, ON**
SE-101 Design Project   *September 2019 – December 2019*
- Built and programmed an autopilot drone that collected images and heat data in flight which it then coalesced into a heat map using Python and C
- Implemented data visualization techniques with Seaborn to highlight areas of heat with an accuracy of up to 0.01 degrees Celsius
- Remade the heat map creation algorithm to use Kernel Density Estimation in under a day to accommodate hardware limitations

Slated   **Waterloo, ON**
Hack the North Project   *September 2019*
- Created a social media platform to streamline scheduling with friends and coworkers using Python and JavaScript libraries
- Developed backend with Flask consisting of user signup functionality through an SQLite database to store encrypted user information
- Effectively communicated with a front-end team to seamlessly integrate different product aspects together

FPSGolf   **Oakville, ON**
Adrenalan Hackathon Project   *August 2019*
- Effectively learned C# to create a first-person golf game for iOS using Unity3D, as well as develop it entirely in one weekend
- Implemented enemy AI to follow and track the player within a certain range, as well as created three distinct levels each with unique enemies and terrain

EXPERIENCE

CTO Boost Inc.   **Toronto, ON**
Software Engineering Intern   *July 2018 – August 2018*
- Learned the concepts of Blockchain in two months to create educational videos for the company that were sent to the CEO
- Improved communication skills through face to face and email inquiries about cryptocurrencies

Janet Barber Aquatics   **Oakville, ON**
Swim Instructor   *September 2016 – December 2018*
- Organized and taught swimming lessons to students aged 2-16, including four with special needs
- With the NLS and LSS first aid certificates, taught important lifesaving skills up to a Bronze Cross level
- Facilitated students to overcome difficult challenges through constructive feedback and written report cards

INVOLVEMENT AND INTERESTS

University of Waterloo: Software developer on the Midnight Sun Solar Car Design Team, Athletic Rep for the Software Engineering 2024 class, Engineering Ambassador Shadow Day team member, Competitive Intramural Basketball Player

High School: Varsity Basketball Captain, Athletic Council, TU20 Chapter President, HackIR Volunteer, AAU Division 1 Basketball Player