

Education

Bachelor's of Computer Science, University of Waterloo (2016 to 2021)

- * Alumnus of the Waterloo Math in Europe Program (Summer, 2017).
- * Took courses on Concurrent programs, Operating Systems and Sequential Programming using MIPS and OS161-kernel.

Volunteering

Mentor, Hackathons and Tech+

- * Ran workshops on web development with HTML CSS, and JavaScript.
- * Took initiative in leading the mentors to help facilitate coaching for more students

Head Leader, Waterloo Orientation

- * Responsible for coordinating a team of 8 volunteers to lead over 100 first year students in their orientation activities.
- * Learned to coordinate with staff and other team leaders by radio.
- * Trained and certified in Emergency First Aid

Languages

- * C
- * C#
- * C++
- * Python
- * Java
- * HTML/CSS
- * JavaScript
- * SQL
- * MIPS
- * French

Technologies

- * Unity3D
- * NodeJS
- * React
- * PostgreSQL
- * ExpressJS
- * JQuery
- * ASP.NET
- * IBM Cloud
- * Google Cloud
- * Firebase
- * OS 161

Work Experience

Co-op Programmer, Blackbird Interactive Sept. 2020 to Present

- * Developed new gameplay systems, UI components, and workflow improvements for an upcoming real-time action-strategy title.
- * Collaborated with artists and designers in an iterative gameplay design process.
- * Worked in a C++ engine based on Entity Component System architecture.

Software Engineering Intern, Inking May. 2020 to Aug. 2020

- * Created new endpoints and features for Inking's RESTful API.
- * Collaborated with engineers to perform both manual and scripted QA, find bugs, push hotfixes, and deliver weekly releases.
- * Performed code reviews for the team, giving detailed feedback and approving pull requests.

Co-op Programmer, Next Level Games Sept. 2019 to Dec. 2019

- * Worked with both programmers and content creators to fix bugs and create workflow improvements for NLG's tools and game engine.
- * Created additional control schemes and a flexible hotkey system to help the studio transition its toolset from 3ds Max to Maya.
- * Designed and built a new animation blending tool for NLG's Character Editor.

Associate Developer, Motive Studios (EA) Jan. 2019 to Apr. 2019

- * Developed workflow improvements for a variety of tools used by artists, writers, voice directors, designers, and other content creators.
- * Implemented new mechanics and gameplay components into production code based on the design and later feedback of gameplay designers and testers.
- * Worked in C# and C++ on large codebases with over 3 million lines, such as Frostbite and the Frostbite Editor.

Personal Projects

BunkerBoxerBot Jul. 2019 to Aug. 2019

- * An AI which plays the classic real-time strategy game Starcraft, developed for the **2019 Aiide Starcraft AI competition**.
- * Manages the economy, production of units and buildings, collection of information, and directs individual units during combat.
- * Built in C++ using the open-source BWAPI library to interact with the game.

Gachoful Girlfriend June 2019

- * A rhythm-based bullet-hell dating simulator where the main love interest is a goose
- * Won **most polished game** of the summer 2019 Waterloo Game Jam

Cozy Roads Sept. 2018

- * **Won Best Use of Google Cloud Platform** at Hack The North, a 36-hour hackathon at the University of Waterloo.
- * Created to help people find the safest possible route to their destination.