

EDUCATION

University of Toronto Scarborough

Sept. 2016 to Current

Computer Science Co-op Program - Software Engineering Specialist

SKILLS

LANGUAGES: Python, C++, C#, Java, SQL**TOOLS:** Docker, Git, Perforce, Jenkins, Bamboo, JIRA, Unity

EXPERIENCE

EA SPORTS · Electronic Arts

Jan. 2020 to Aug. 2020

Software Developer Intern, NHL Online Team

Burnaby, BC

- Developed remote procedure calls using C++ and MySQL to implement major online features: on-demand notifications and season reward granting, for **NHL 21**
- Automated PS4 and Xbox One build versioning via Python reducing time spent by 200x
- Designed and implemented GUI config editor using Python Tkinter for producers, alleviating software engineer workloads during game balancing
- Implemented client-side logging using C++ to investigate and patch major marketplace bug

DEMONWARE · Activision Blizzard

Jan. 2018 to Dec. 2018

Software Developer Intern, Titles Normandy Team

Vancouver, BC

- Developed, built and deployed C++ client code to support Clans services for **Call of Duty: Black Ops 4**
- Refactored legacy Bash tests into paralleled Docker Compose test suites speeding up testing by 3x
- Developed asynchronous Python load-test tool to inspect services under realistic load
- Wrote and analyzed reports with 2 million concurrent player load using MySQL and Python to reveal vulnerable services for mitigation

PROJECTS

BEACH EPISODE · Casual Arcade

June 2020

- Developed 2D game using Unity in 1 week depicting day job of snack vendors
- Programmed customer AI using A* pathfinding and finite state machines

MOVING FOURWARD · Roguelike

Sept. 2019

- Developed NPC and enemy combat AI scripts with behaviour tree model in Unity C#
- Implemented procedurally generated dungeon system with endless gameplay

2D ROYALE · Multiplayer 2D Shooter

Dec. 2018

- Designed and developed networking back-end for gameplay designers via Python sockets
- Implemented multithreaded server-client multiplayer system for up to 5 players using Hamachi

EXTRA-CURRICULAR

UTSC GAME DEVELOPMENT CLUB · Leader

Feb. 2018 to Current

- Lead technical workshops and talks on game design and development
- Plan events to showcase and foster game development community
- Organized and judged first UTSC game jam with 15 participants