Montreal Quebec Canada

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Work Experience

Behaviour Interactive Montreal, QC, Canada

SYSTEM PROGRAMMER (C++, UNREAL ENGINE)

May 2021 - Present

- Worked on the popular online game Dead by Daylight on the Systems and UI team. Dead by Daylight is an online multiplayer horror game with 3 million weekly active users, it is consistently in the top 15 most played games on Steam.
- Created the mission-critical Archives Menu in C++ with UMG (Unreal Motion Graphics), all players interact with the Archives for their player progression. Implemented using Model-View-Presenter pattern, with specific focus on performance and maintainability to support the evolving nature of an online game.
- Led the UI development for the Halloween 2021 special event, worked closely with Gameplay and Art team to deliver an event which was the most successful to date. We reached record peak concurrent players during this event.
- · Worked on development of 5 DLC packs, including the highly sucessful Resident Evil, Hellraiser, and *** chapters.

GAME DEVELOPER CO-OP (C++, UNREAL ENGINE, ACTIONSCRIPT)

Sept. 2020 - Dec. 2020

- Developed new menus in C++ with UMG UI framework, implemented a new feature in the game settings for users to scale their menus and HUD.
- Reduced lag spikes by 80% for console players (PS4, XB1, Switch) by making extensive performance improvements to loadout menus used by millions players. Investigated best practices of the UI framework, and performed reworks on problem areas.
- · Provided bug fixes prior to releases, working on all areas of the game such as UI, Gameplay, Engine, Sound.

Escrypt Bosch Waterloo, ON, Canada

SECURITY DEVELOPER CO-OP (C, PYTHON)

May. 2020 - Aug. 2020

- Worked with an experienced team developing a custom hardware security module (HSM) for General Motors.
- Developed low level code in C for microcontrollers, rigorously following MISRA C guidelines for security, portability, and reliability.
- Produced architecture designs and documentation to ensure code met the formal specifications.

DOZR Waterloo, ON, Canada

SOFTWARE ENGINEER CO-OP (NODE.JS, REACT)

Sept. 2019 - Dec. 2019

- Dozr is a construction equipment rental software startup, like Airbnb but for construction equipment.
- Developed an invoicing module in Node.js which automated the creation and maintenance of all invoice data.
- Advanced involvement in data modeling decisions around the implementation and modification of features such as add-to-cart, equipment
 prices, contracts, invoices, and orders.
- Optimized inefficient mongoose queries by utilizing standard MongoDB principles, increasing speed of many requests on the rental management system by up to 2X.

Veeva Toronto, ON, Canada

SOFTWARE ENGINEER CO-OP (NODE.JS, REACT)

Jan. 2019 - Apr. 2019

- Responsible for deployments and infrastructure of Web2PDF on AWS.
- Implemented first stages of a new logged-in experience web app for Web2PDF with React frontend and Node.js/express backend. Designed the schema and architecture for the data model.
- Developed new features and improvements to the core PDF creation engine such as custom page height and mobile viewport support.

AUTOMATION ENGINEER CO-OP (JAVA)

May 2018 - Aug. 2018

- Managed, created and maintained all test cases and testing suites for the Web2PDF product.
- Increased automation coverage by over 50% for Web2PDF.
- Implemented new automation testing suites in Java for UI (Selenium) and performance testing.

Education

University of Waterloo

Waterloo, ON, Canada

Bachelor of Computer Science, Honours, Co-op

Sept. 2016 - May 2021

- 3.2/4.0 GPA, Minor in History
- Relevant Coursework: Data Structures, Algorithms, OS, Concurrency, Security and Privacy, OOP, Databases, Networks, Machine Learning, Graph Theory, Logic, User Interfaces

Skills

- Languages: C++, C, JavaScript, ActionScript3, Python, Java
- Frameworks/Tools: Unreal Engine, UMG UI, Node. js, GDB, Git, Perforce, Scaleform, AWS (S3, EC2), React, SQL, MongoDB, ŁTFX, Selenium