# Ricky Lu

## **SKILLS**

Languages Java, C, C++, C#, JavaScript/TypeScript, HTML/CSS, MQL4, Racket

Tools & Technologies Android Studio, Unity Engine, Cypress, Bootstrap, MetaTrader 4, Jenkins, Git, Appium

#### **EDUCATION**

#### Bachelor of Computer Science, University of Waterloo

Sep 2020 - Apr 2025

Relevant Computer Science Courses: Designing Functional Programs, Foundations of Sequential Programs, Algorithm Design & Data Abstraction, Data Structures & Data Management, Computer Organization & Design, Object-Oriented Software Development, Logic & Computation

# **EXPERIENCE**

# **Behaviour Interactive** Game Programmer

Montréal, QC | May 2022 - Aug 2022

- Developed and enhanced **C#** game components in a **scrum** team for **Jurassic World Primal Ops** , a top-down action adventure **Unity** mobile game with **over 100 thousand downloads**
- Cooperated with developers to implement a paid daily rewards system and modified related backend routes using **TypeScript** to boost game retention and monetization
- Designed a carousel view using **inheritance** and **interfaces** to create reusable code while improving user experience
- Collaborated with UI/UX teams to integrate visual components and debugged game systems to resolve defects

# Fleet Complete 🗹 | Automation Developer

Waterloo, ON | Sep 2021 - Dec 2021

- Researched and implemented a front-end automation framework in an agile environment using Cypress, TypeScript, and Git,
  which will act as a blueprint for other company automation projects
- Integrated the framework into CI/CD using Jenkins to ensure developers receive fast and continuous feedback effectively
- Implemented functions that wait until it receives server data before performing tests to reduce test instability significantly
- Troubleshot an existing login function to enable testing on all browsers and sped up testing substantially

## **Customized MetaTrader Project**

Markham, ON | Nov 2018 - Dec 2021

- Developed trading algorithms using **MQL4** and **MetaTrader 4** that incorporates data collection and order execution to automate client's trading routine
- Maintained and updated trading algorithms at the client's request to optimize trading efficiency
- Communicated with the client through email or face-to-face interactions to troubleshoot problems

#### **PROJECTS**

# **Unity Game - 3D Ball-rolling Game** 🗹 | C#, Unity Engine

Sep 2021 - Present

- Created a 3D ball-rolling game using the C# and the Unity Engine
- Implemented custom physics, various obstacles, and bonus items to create a smooth, responsive gameplay experience
- Developed a settings menu with customized controls, sounds, and display that is persistent across the game

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Aug 2019 - Present

- Developed an application using Java and Android Studio that lets users discover new locations while going to their destination
- Integrated Google Maps API into the application to ensure correct and up-to-date map data
- Allowed users to create profiles so they can filter the type of places the application displays to them

## Portfolio Website 🗹 | HTML, CSS, JavaScript, Bootstrap

Apr 2021 – May 2021

- Developed a portfolio website from scratch using HTML, CSS, and JavaScript
- Utilized Bootstrap to ensure the website is responsive and well-formatted across all devices

## **Unity Game - 3D Parkour/FPS Game** (C#, Unity Engine

Jul 2020 - Sep 2020

- Created a 3D Parkour/First-Person Shooter game using C# and the Unity Engine
- Implemented more advanced gameplay elements, such as sliding mechanics, shootable targets, and pressure plates
- Developed a tutorial level to ensure the players will be familiar with the gameplay elements

## Android App - Weather Forecast 🕜 | Java, Android Studio

Jul 2019 - Aug 2019

- Developed an application using Java, Android Studio, and OpenWeatherMap API that displays the weather in a specific location
- The application displays the current weather at the location, as well as a 5-day forecast

## **Computer Science Games** IJava

Sep 2018 - Jun 2019

- Developed a 2D platformer, a typing game, and a card game using Greenfoot, an Java IDE as projects for computer science
- The platformer has moving platforms, springs, double jump, and blocks that toggle on/off when jumping. The user is scored based on time and the number of fails