# Ricky Lu

**♦** (647) 864-0999 **■** rklu@uwaterloo.ca **%** ricky77768.github.io **in** Ricky77768 **?** Ricky77768

#### **SKILLS**

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

Tools & Technologies Android Studio, Jetpack Compose, RxJava, Unity, Cypress, Jenkins, MetaTrader 4, Git/Perforce, Jira

#### **EDUCATION**

University of Waterloo | Bachelor of Computer Science

Sep 2020 - Apr 2025

Relevant Courses: Object-Oriented Software Development, Data Structures & Data Management, Algorithms, Operating Systems

#### **EXPERIENCE**

## Faire 🗹 | Android Engineer

Waterloo, ON | Jan 2023 - Apr 2023

- Developed app features across 5 screens using Kotlin, RxJava, and Jetpack Compose, following the MVVM/MVP architecture
- Updated one-to-one chat interface to support many-to-one communication between 2500+ users
- Implemented invoice filters and split invoice-related API calls to reduce screen load time by 40%
- Removed 4500+ lines of unused product collection code, improving codebase maintainability and module compile time by 8%

# **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 using Jira 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 with MQL4 and MetaTrader 4 using data and order execution to automate trading routines
- 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 3D Games 🗹 🗹

2020 - 2022

- Created a ball-rolling game and a parkour/first-person shooter game using C# and Unity Engine
- Developed custom physics, sliding mechanics, shooting targets, bonus items, persistent settings menu, and tutorial levels to ensure a smooth, responsive game experience

Portfolio Website 🗹 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

## Android Applications 🗹 🗹

2019 - 2021

- Developed a map application and a weather forecast application using Java and Android Studio
- The map application uses Google Maps API and customizable profiles to help discover new locations en route to destinations
- The weather application utilizes **OpenWeatherMap API** to display the current weather and a 5-day forecast at a location

## Computer Science Games 🗹

2018 - 2019

- Developed a 2D platformer, a typing game, and a card game using Greenfoot, an Java IDE as class projects
- Created moving platforms, springs, double jump orbs, toggle blocks, and a scoring system based on time and the number of fails