

# Jackie Yuan Jun Xu

Honours Computer Science (2016 – 2021) – University of Waterloo

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## Summary of Qualifications

- Strong Software Engineering background in **Algorithms, Data Structures, Design Patterns, and Cybersecurity**
- Proficient in languages/frameworks including **Python, C/C++/C#, Java, SQL, MongoDB, HTML, JS, and CSS**
- Expertise in various assets including **Front-end, Back-end, Mobile, Database, and Game** development
- **Independent** and **fast** learner with over **3 years** of accumulated experience

## Employment

### Software Engineer • *ContextLogic/Wish Corp. (Toronto, ON)* (May – Aug 2019)

- Wrote new tools and **API** endpoints for the Merchant platform using **Python, JavaScript** and **MongoDB**
- Developed **Cron** jobs that **automate** employee performance and product quality reports
- Created metric boards using **Prometheus** to monitor teams, merchants and products
- **Refactored** and **decoupled** code for the platform's **Role-based Access Control** permissions system
- Implemented a **highly impactful** penalty system that directly affects merchants and products

### Mobile Development Intern • *Square Enix Montréal (Montréal, QC)* (Sep – Dec 2018)

- Designed and implemented **proprietary** and **experimental** game features in **Unity** and **C#**
- Created a batch script that enables **automation** of **parallel deployments**
- Performed **optimizations** that reduced **memory leaks** and unnecessary **allocations** by **over 100 times**
- Created Unity editor scripts and C# extensions that help save time for other employees
- Formulated and implemented a post-game analytics system using a custom **Ranking Algorithm**

### Game Developer • *Behaviour Interactive (Montréal, QC)* (Jan – Apr 2018)

- Implemented core gameplay features and bug fixes using **Unity** and **XML**
- **Optimized** elements involving heavy **garbage collection** and large data pulls using **asynchronous coroutines**
- Remodelled the way map data is managed to remove **over 100** file dependencies
- Reported and fixed various **game-breaking bugs** and **vulnerabilities**

### Full Stack Developer/URA • *MyEffect/University of Waterloo (Kitchener, ON)* (May – Dec 2017)

- Developed **Python** scripts to analyze user trends from **SQL** server logs for the URA **research project**
- Discovered and patched a **critical security vulnerability** that can compromise users' private information
- Compiled a detailed guide for the company platform to improve its codebase **documentation**
- Wrote multiple **research reports** on the specifications of tools and data analysis

## Projects and Activities

- **PicFive** – Hackathon web project involving **Image Recognition** and **Natural Language Processing** technologies to associate words with their corresponding images
- **Game Development Projects** – Modernized versions of classical games using **Python's Pygame** library with additional complex mechanics such as **Physics, Enemy tracking, Map generation, and Path-finding**
- **WatRGoose** – **Android** puzzle mini-game as part of the MLH local hack day hackathon using **Android Studio**