

KAI YI (DAVID) ZHANG

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github.com/KaiYi-David-Zhang 4A Computer Science 8 Month Co-op Available

EXPERIENCE

Game Programmer

Behaviour Interactive

September 2021 – December 2021 Montréal, QC, Canada

- Developed features for an upcoming sequel to a well-known AAA game franchise
- Implemented improvements across multiple platforms including PlayStation, Xbox and Nintendo Switch
- Implemented the save game feature on PlayStation 4 and 5
- Accelerated development through improving the QA team's efficiency by adding new and modifying existing platforms on the team's CI/CD system
- Upgraded the build command to adapt to multiple geographical regions set by PlayStation for its games
- Fixed many bugs related to UI, debug menu, save data and system crashes
- **Tools:** Agile, C++, C#, Kotlin, Microsoft GDK, PlayStation SDK, Nintendo SDK

Software Developer

Vital Images

January 2021 – April 2021 Waterloo, ON, Canada

- Worked on Vitrea® Connections, a medical imaging connection software that helps radiologists access patient data efficiently
- Implemented the ability to remove user data from Vitrea® Connections' database when requested by the user
- Developed fixes to improve storage efficiency by avoiding unnecessary calls to costly backend procedures
- Fixed synchronization issues between frontend and backend
- Fixed image duplication issues to free up backend storage space
- **Tools:** Agile, Java, Python, TypeScript, JavaScript, NoSQL

PROJECTS

WLP4 Compiler

University of Waterloo

January 2020 – April 2020

- Implemented a compiler to compile all valid WLP4 code (a teaching language from Waterloo) into MIPS machine language
- Designed programs to scan WLP4 code into tokens, parse the tokens and ultimately generate the MIPS machine language
- **Tools:** C++

Polygon Smash (Unity Game)

Personal Project

June 2020 – August 2020

- Created a Super Smash Bros inspired fighting game using Unity
- Created sprites for character animation, and implemented the main hit-box and hurt-box logic
- Developed the camera logic to appropriately track all players during gameplay
- **Tools:** Unity, C#

HIGHLIGHTS

- 4A Computer Science at the University of Waterloo
- Experienced in: C++, C, Java, Git
- Familiar with: C#, HTML, CSS, SQL, Kotlin, Python, Bash
- Experienced in working with large-scale software development
- Capable of quickly adapting into new development environment
- Fast learner, good communicator and a great teammate

DEVELOPMENT TOOLS

Confluence Jira Perforce Helix Core
Unity Bootstrap 4 Bitbucket
Jenkins TeamCity Microsoft GDK
PlayStation SDK Nintendo SDK
Visual Studio IntelliJ Android Studio
Eclipse Collaborator Windows
Unix macOS Xcode

EDUCATION

Candidate for Bachelor of Computer Science

University of Waterloo

September 2018 – April 2023

Relevant Courses:

- Introduction to Artificial Intelligence
- Introduction to Database Management (SQL)
- Elementary Algorithm Design and Data Abstraction (C)
- Object-Oriented Software Development (C++)
- Applied Cryptography
- Operating Systems (C)
- User Interfaces (Java)

LEADERSHIP

Lifeguard/Swimming Instructor

YMCA Oakville

September 2016 – April 2017

- Insured pool safety by working in a team
- Designed lesson for young swimmer to learn