

Felix Guo

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🏠 felixguo.me « 📄 github.com/fg123

SKILLS >

Programming C, C++, Java

Web HTML5, CSS, Javascript, jQuery, PHP, MySQL

Game Design Unity, XNA, SFML

Limited Python, Racket (Scheme)

Team Based Detail-Oriented, Self-Motivated, Open-Minded

EXPERIENCE >

Inkpad Studios (Mobile Gaming Startup)

VANCOUVER, BC

Game Developer

Nov. 2014 - JUN. 2016

- Sole developer of Pedal Panic, a top-down tilt-controlled cycling game, working with Unity, Java and C#
- Implemented all parts of the game structure, including an audio manager for Unity, a randomized terrain generator, parallax scrolling for the background, and ads with 3 different ad mediators for both interstitial ads and rewarded ads on Android
- Coordinated weekly meetings with game design, graphic artist, and sound artist teams to ensure task deadlines were met based on the Agile methodology

Wish Youth Network Society

VANCOUVER, BC

Director of IT » wishyouthnetwork.org

JUN. 2015 - PRESENT

- Developed and currently managing website for Wish Youth Network Society, a non-profit organization
- Built using frontend Bootstrap with animate.css, and backend with PHP and MySQL
- Created custom blog management system to allow other members to create and update blog posts with proper data serialization to prevent SQL injection

PROJECTS >

WendyScript

Dynamically Typed Programming Language » felixguo.me/wendy

Nov. 2016 - PRESENT

- Interpreter written fully in C, supports dynamic typing, first class functions with closures and first class objects (via class-based inheritance), including a lexer/parser, code-generator, and a bytecode VM
- Developed recursive descent to parse custom grammar into an abstract syntax tree
- Developed custom VM and bytecode generator from abstract syntax tree

Lumen Astrum

Turn Based RTS Game

OCT. 2012 - PRESENT

- Created with Unity for the primary game visuals, C# for backend processing
- Implemented A* distance heuristic path finding and breadth first searching for a hexagonal grid
- Multiplayer networking implemented using Lidgren to transmit live data packets during gameplay for unit movement and attacks
- Developed custom OOP data serialization/deserialization to transmit each unit or structure's attributes as packets

Multiplayer Tetris

It's multiplayer Tetris!

OCT. 2016

- Created with SFML and C++, with multiplayer capabilities using SFML's UDP networking libraries
- Used rotational matrices to map out piece rotations and live prediction to show the "ghost piece," a graphic that indicates where the current block will end up if hard dropped
- Implemented custom Textbox and Button UI classes for use in SFML for the main menu UI

EDUCATION >

University of Waterloo and Wilfrid Laurier University

2016 - 2021 (EXPECTED)

Candidate for Bachelors of Computer Science and Business Administration