Felix Guo

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🏠 felixguo.me « git github.com/fg123

SKILLS ›

Programming	C, C++, Python	**Web**	HTML5, CSS, Javascript, PHP, MySQL
Game Design	Unity, SFML, UE4	**Android**	Java, Kotlin

EXPERIENCE ›

Citadel Securities LLC. **Chicago, IL**
Software Engineer Aug. 2021 - Present

- (NDA) Developing tools and infrastructure for execution services in C++ for handling retail and institutional orders

Riot Games Inc. **(Remote) Los Angeles, CA**
Software Engineering Intern Jun. 2020 - Aug. 2020

- Worked on the League of Legends Champions Engineering team, focused on game engine code in C++
- Fixed various player-impacting champion bugs and scripted abilities on upcoming champions
- Implemented features and improvements to champion scripting tool used by designers
- Refactored game engine network registration code to optimize for game object creation

Citadel Securities LLC. **Chicago, IL**
Software Engineering Intern Sept. 2019 - Dec. 2019

- (NDA) Developed tools, infrastructure, and testing systems in equity and options market making in C++, Python and Bash

Google LLC. **Sunnyvale, CA**
Software Engineering Intern May. 2018 - Aug. 2018

- Helped develop and launch KUnit, a unit-testing framework for the Linux Kernel
- Built user-facing scripts in Python to interact with the KUnit to run and manage unit tests
- Implemented mock types, in-sequence expectation matching and other unit testing features in C

Yahoo! Inc. **Sunnyvale, CA**
Software Engineering Intern Jan. 2018 - Apr. 2018 | May. 2017 - Aug. 2017

- Created new Android "Accordion" ad layout for Growth and Monetization team with a custom view folding effect developed with Java to industry standards, raising click-through rates from 0.13% to 0.23%
- Developed Draft Chat and Draft Order pages up to spec, as part of Yahoo Fantasy Sports's live draft system
- Developed multiple features in Kotlin for Fantasy Sports Android such as Start Active Players for the week
- Planned and implemented complex UI flows on Android such as the native ability to Create a Daily Contest

PROJECTS ›

WendyScript
Programming Language – wendy.felixguo.me Nov. 2016 - Present

- Compiler written fully in C, supports dynamic typing, first class functions with closures and meta-objects, including a recursive descent lexer/parser, code-generator, and a custom bytecode VM

Replication
3D Game Engine – github.com/fg123/replication May. 2021 - Present

- Developed in C++ a fully featured 3D game engine, with a WebGL and Web Assembly frontend from scratch
- Built out a collision and physics engine, deferred rendering engine, and network replication with client-side prediction
- Integrated custom programming language WendyScript to build game object behavior in game engine

Nick PDF
Generate PDFs from XML Markup – github.com/fg123/nick May. 2017 - Present

- Employs similar layout processes as Android's layout system, with custom written measure, layout and draw passes
- Supports generic UI templating system that allows reusing of elements to build complex, reusable layouts
- This PDF was generated with Nick; the XML source can be found at *github.com/fg123/portfolioWebsite*

EDUCATION ›

University of Waterloo and Wilfrid Laurier University
Bachelors of Computer Science, Combinatorics and Optimization Minor 2016 - 2021
Bachelors of Business Administration, Finance Concentration