

# Felix Guo

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🏠 [felixguo.me](http://felixguo.me) « 📄 [github.com/fg123](https://github.com/fg123)

## SKILLS >

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**Programming** C, C++, Python

**Web** HTML5, CSS, Javascript, PHP, MySQL

**Game Design** Unity, SFML

**Android** Java, Kotlin

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

## EXPERIENCE >

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### Google LLC.

*Software Engineering Intern*

**Sunnyvale, CA**

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 minor unit testing features in C

### Yahoo! Inc.

*Software Developer Intern*

**Sunnyvale, CA**

Jan. 2018 - Apr. 2018

- 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

### Yahoo! Inc.

*Software Developer Intern*

**Sunnyvale, CA**

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
- Given highest rating (Outstanding) by manager in Waterloo Co-op Performance Evaluation

### Inkpad Studios (Mobile Gaming Startup)

*Game Developer*

**Vancouver, BC**

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 3 different ad mediators for both interstitial and rewarded ads on Android

## PROJECTS >

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### WendyScript

*Programming Language – [wendy.felixguo.me](http://wendy.felixguo.me)*

Nov. 2016 - Present

- Compiler written fully in C, supports dynamic typing, first class functions with closures and first class objects, including a lexer/parser, code-generator, and a bytecode VM
- Developed recursive descent parser to parse custom grammar into an abstract syntax tree as well as a VM to run custom compiled binaries

### MercuryWM

*Tiling, Multi-windowed JS Desktop Environment – [felixguo.me/mercury](http://felixguo.me/mercury)*

Jul. 2017 - Present

- Developed a new-tab page replacement that is based on a tiling window manager using React and Redux
- Created a JSON object based virtual filesystem with corresponding bash commands to navigate
- Developed Javascript API to allow user created scripts to interact with main window through iFrames to allow diverse, interactable, user-created extensions such as displaying a clock, weather, or to-do list widget

### Nick PDF

*Generate PDFs from XML Markup – [github.com/fg123/nick](https://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](https://github.com/fg123/portfolioWebsite)

## EDUCATION >

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### University of Waterloo and Wilfrid Laurier University

*Candidate for Bachelors of Computer Science and Business Administration*

2016 - 2021 (Expected)