### Kenrick Rilee

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### WORK

Full Stack Engineer at PlanGrid (2015-16, 16 months)

• Python (Flask):

Designed and implemented a feature-flagging system, accessible by all platforms. Previous tools required code/resource deployments.

Wrote the initial code for downgrading Stripe users with failed payments, automating a previously laborious, manual process.

Refactored and added tests to fragile sections of our payments code which had been blocking critical work on user management.

Worked on the initial version of our public API, a critical element in enterprise deals.

• Javascript (React, Node):

Worked on internal tools for support & sales.

Software Engineer at Codecademy (2013-14, 9 months)

• Javascript & HTML:

Worked on the 'codebits' feature which allows users to create their own websites.

Helped implement a rebrand of the entire Codecademy website.

Owned the ideation, prototyping, and implementation of live-coding widgets.

# Co-founder of Rex/Mapsaurus (2012-13, 15 months)

• TigerLabs University Accelerator (summer 2012), raised an angel round of \$200k (late 2012). Built an Android app recommendation engine that was used by 60,000 people. Was responsible for pitching and investor relations.

## • Python (Flask):

Built a distributed Google Play web crawler (w/ multiple IP addresses to avoid throttling). Built a recommendation engine which performed a PageRank inspired BFS on crawled app-to-app relationships.

Built a search engine which leveraged app-to-app relationships to provide results unbiased by keyword hacking.

Performed event analytics which tied user events to data about apps our users later installed.

# Android:

Designed & built a smooth interface for exploring a network of app-to-app relationships simply by swiping.

Built a batch uninstaller which allows users to easily uninstall multiple apps at a time.

Built a multi-pane tablet app, leveraging my open-source library *PanesLibrary*.

### **ACADEMICS**

Princeton University: (BSE, Computer Science)

• Coursework: advanced graphics, graphics, networks, computer vision, operating systems, systems, algorithms & data structures, computational physics, number theory.

### Eleanor Roosevelt High School Greenbelt, MD

• Valedictorian: class rank 1st out of ~800 students.

# **PROJECTS**

(much more at cricklet.github.io!)

# Javascript:

• blue-ot.js: ground-up implementation of collaborative text editing via operational transform (the algorithm behind Google Docs). It handles conflict resolution for multiple clients over a high-latency out-of-order network. Built with ES6 & FlowType. <a href="https://github.com/cricklet/blue-ot.js">https://github.com/cricklet/blue-ot.js</a>

### Android or Java:

- PanesLibrary: open-source library for creating flexible phone/tablet apps.
  github.com/cricklet/Android-PanesLibrary (300 stars on GitHub)
- AutoWallpaper: updates your wallpaper with images from Reddit's API.
  github.com/cricklet/Auto-Wallpaper-for-reddit- (10,000 downloads)
- Dead Arcade: 2D platformer, built completely from scratch with OpenGL. (20,000 downloads)

### C++:

 Hatched: OpenGL renderer built from scratch, implementing VSMs, SSAO, and real-time hatching through an auto-reloading shader pipeline. <a href="mailto:github.com/cricklet/Hatched">github.com/cricklet/Hatched</a>

Other: Python, React, Mocha/Chai, FlowType, Flask, Docker