

**Kenrick Rilee**

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[cricketlet.github.io](http://cricketlet.github.io)

## 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).  
Was responsible for pitching and investor relations.  
Built an Android app recommendation engine, garnering ~60,000 downloads.
- *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*.
- *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.

## 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.

## PERSONAL PROJECTS

(*much* more at [cricketlet.github.io!](https://cricketlet.github.io/))

### Javascript:

- *blue-ot.js*: a ground-up implementation of collaborative text editing via operational transform, handling conflict resolution for multiple clients over a high-latency out-of-order network. Built using FlowType & ES6.  
<https://github.com/cricketlet/blue-ot.js>

### Android:

- *PanesLibrary*: a library for creating multi-pane phone/tablet apps. On phones, fragments are rendered one at a time. On tablets, fragments are rendered in a swipeable, multi-pane layout.  
[github.com/cricketlet/Android-PanesLibrary](https://github.com/cricketlet/Android-PanesLibrary) (300 stars on GitHub)
- *AutoWallpaper*: updates your wallpaper with images from Reddit's API.  
[github.com/cricketlet/Auto-Wallpaper-for-reddit-](https://github.com/cricketlet/Auto-Wallpaper-for-reddit-) (10,000 downloads)
- *Dead Arcade*: a 2D platformer, built completely from scratch with OpenGL. (20,000 downloads)

### C++:

- *Hatched*: an OpenGL renderer, built from scratch, with a hot-reloading shader pipeline. Implemented shaders include hatched pencil-style shading, variance shadow maps for soft shadows, and screen-space ambient occlusion.  
[github.com/cricketlet/Hatched](https://github.com/cricketlet/Hatched)

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