

Kenrick Rilee

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cricketlet.github.io

WORK:

Full Stack Engineer at PlanGrid (2015-current, 14 months)

- *Python (Flask):*
Worked on automating the process of downgrading users with failed payments.
Worked on the initial version of our public API.
Worked on our feature-flagging system.
Rewrote and added tests to fragile sections of our payments code.
Focused on increasing test coverage and decreasing patching in our tests.
Gave well-received talks to all of engineering focusing on managing state (OO vs FP) and organizing code for testability (i.e. hoisting dependencies in procedural code, dependency injection for OO code).
- *Javascript (React, Node):*
Worked on internal tools for support & sales.
- *Docker:*
Containerized the services on my team using docker compose such that they could be easily run in arbitrary combinations and configurations.

Software Engineer at Codecademy (2013-14, 10 months)

- *Rails:*
Learned and applied TDD as it applies to both feature development & bug-fixing.
- *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 (2012-2013, 1 year 3 months)

- *TigerLabs University Accelerator* (summer 2012), raised an angel round of \$200k (late 2012).
Built an Android app recommendation service that was used by 60,000 people.
- *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 allowed 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.js*: an implementation of collaborative editing, utilizing FlowType.
<https://github.com/cricklet/blue.js>
- *Star Command*: a toy star-ship sim, experimenting with stateless code & algebraic types.
github.com/cricklet/star-command
- *Rest In Peace*: a <canvas/> game built from scratch in 48 hours for Ludum Dare 30.
github.com/cricklet/ld48-rip

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. (20,000 downloads)
- *2nd Place Princeton Facebook Hackathon (2011)*: built an RTS game from scratch in 22 hours.
- *2nd Place Hack Princeton (2012)*: built an Android app recommendation algorithm.

C or C/C++:

- *Hatched*: OpenGL renderer built from scratch, implementing VSMs, SSAO, and real-time hatching through an auto-reloading shader pipeline powered by RAIL, lambda closures, shared_ptr, etc.
github.com/cricklet/Hatched
- *Wolfenstein 3D AI*: a program that beats the first level of Wolfenstein 3D by analyzing rendered pixels and spoofing input events. I worked on localization via range-finding and particle filters.
- *Advanced Graphics*: path tracer, laplacian mesh editing, image analogies.
- *Graphics*: ray tracer, mesh manipulation, shaders, OpenGL, etc.
- *OS*: boot-loader, kernel, scheduling, virtual memory, file system.

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