Kenrick Rilee - kenrick.rilee@gmail.com - cricklet.github.io

WORK:

Full Stack Engineer at PlanGrid (*2015-current, 8 months*)

- *Python (Flask)*:
  Rewrote and added tests to sections of our payments code that were faulty and fragile.
  Worked on the initial version of our public API, evangelizing code quality within the project.
  Focused on decreasing unnecessarily complex state, increasing test coverage, and decreasing complex inheritance & patching in our tests.

- *Javascript (React, Node)*:
  Worked on internal tools for support & sales.
  For our public API, I built a authed reverse proxy (leveraging async/await).

- *Docker:*
  Containerized our services using docker compose such that they could be easily run in arbitrary combinations and configurations.

DevOps intern at Venmo (*2014, 2 months*)

- Used puppet to setup stack monitoring and analytics. Solidified my unix skill-set.

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, protoyping, and implementation of live-coding widgets.

Co-founder of Rex/Mapsaurus -- now defunct (*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.
  Implemented multiple recommendation algorithms, some of which required pre-computing & caching recommendations offline.
  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 later installed on our user’s devices.

- *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*.

PROJECTS: (much more at cricklet.github.io)

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. Implements VSMs, SSAO, and real-time hatching through an auto-reloading shader pipeline powered by RAII, 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.

Javascript:

- *Rest In Peace*: Built a <canvas/> game from scratch in 48 hours for the Ludum Dare 30 competition. github.com/cricklet/ld48-rip

Other: Scala, Python, React, Flask, Docker, Mongo, Redis

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.