Kenrick Rilee
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ACADEMICS:

Princeton University (2009-2012)

- Majoring in CS, went on a leave of absence in 2012 to do a startup.
- CS coursework: graphics, networks, advanced programming, computer vision, operating systems, algorithms & data structures, systems, computational physics, reasoning about computation.

Eleanor Roosevelt High School, Greenbelt, MD (2005-2009) unweighted 4.0

- Valedictorian (class rank 1st out of ~800 students)

AWARDS:

- 2nd place at Facebook Princeton Hackathon 2011
  - Built a real-time-strategy/tower-defense game from scratch in 24 hours.
- 2nd place at HackPrinceton 2012 (w/ Alice Zheng)
  - Built an app recommendation algorithm + front-end.

WORK:

2012-2013: Co-founded Rex/Mapsaurus (rexapp.com)

- TigerLabs University Accelerator (summer 2012), raised a small angel round (late 2012).
- One of the two main co-founders. My responsibilities (in addition to coding) included general project management and investor/partner relations.

2011: Co-founded Conical Development (play.google.com/store/apps/details?id=game.zombie)

- Led a team of two other people (full-time coder, part-time artist). Built (from scratch) and published an Android game.

2008-2010: Internship at NASA GSFC with Honeywell and Caelum Research Corporation

- Built a di-graph visualizer that replaced proprietary software.

2007: Internship at University of Maryland

PROGRAMMING: (more at cricklet.github.io)

Android (2011 onwards):

- Rex frontend (rexapp.com):
  - Features: interactive web of related apps, recommendation engine, batch app uninstaller, search, etc.
  - Responsive phone/tablet design and nearly bug-free 2.x/4.x support.
- PanesLibrary (github.com/cricklet/Android-PanesLibrary):
  - Open-source library for creating flexible phone/tablet apps.
  - On Github: starred by 200+ people, forked by 50+ people. Used in production.
- AutoWallpaper (play.google.com/store/apps/details?id=com.autowallpaper.free):
  - Live-wallpaper that updates with images scraped from Reddit's API.
- Dead Arcade (play.google.com/store/apps/details?id=game.zombie):
  - 2D platformer, built completely from scratch. Downloaded ~17,000 times.

  - Uses OpenGL, entity/component design, object pools, etc.

Java (2005 onwards):

- Facebook Princeton Hackathon 2011 (github.com/cricklet/ZRTS-24hr-hackathon)
  - Built an RTS/TD game from scratch in 22 hours.
  - Features: resource gathering, base building, and gradient descent AI.
- 2D Game Engine (github.com/cricklet/2D-Game-Engine-2011)
  - Built a game engine from scratch to allow simple, quick creation of new games.
  - Created a simple platformer, top-down space game, etc.
- Wolfenstein: Source (http://www.moddb.com/mods/wolf4d)
  - Built a program that converts Wolfenstein 3D maps to Half Life 2.

Python (2012 onwards):

- Rex backend (http://www.rexapp.com)
  - Used Pymongo, Redis, Flask, BeautifulSoup, ElasticSearch, etc.
  - Helped build a web-crawler, web-server, algorithms, and analytics.
- fmylife.com style website
  - Built a joke website to learn Django. Published it among my friends and got dozens of submissions and hundreds of votes.
- 2nd at HackPrinceton 2012
  - Built an app-store crawler and recommendation engine.

C or *C/C++* (2009-2012):

- Computer Graphics (A): [one of the hardest coding courses at Princeton]
  - Projects: ray tracer, image manipulation, 3d mesh manipulation.
  - Built (with a partner) a top-down zombie shooter game from scratch. Features I built include boid AI, billiard ball physics, randomly generated maze levels, and random terrain + lightmaps. (cricklet.github.io/past.html#426)
- Computer Vision (A-):
  - Built (with two partners) a program that plays Wolfenstein 3D. Features I built include PF localization and range finding. (cricklet.github.io/past.html#429)
- Operating Systems (B): [the hardest coding course at Princeton]
  - Projects: boot-loader, kernel, scheduling, virtual memory, file system
- Networks (A-):
  - Projects: simple server, HTTP Proxy, Router, Simple TCP

JavaScript and *HTML5* (2010, 2012):

- Rex HTML5 front-end
  - Built an interactive web of inter-related apps. Gained experience with D3.js, Canvas, and SVG. Focused on achieving low-latency and high frame-rates.
- Advanced Programming Techniques (B+):
  - Built the front-end for a Settlers of Catan style boardgame. Used SVG.

GLSL (2012):

- Developed an algorithm that computes multi-bounce indirect lighting via the power formulation of radiosity and imperfect shadow maps. It didn't work well.

Other technologies: *MongoDB*, *Redis*, *OpenGL*, *Flask*, *JSON*, *Django*, *MySQL*, *etc*