Brandon S. Kase

brandon.kase@gmail.com • bkase.com • github.com/bkase • @bkase_

Education

Carnegie Mellon University Pittsburgh, PA • Computer Science Major **Spring 2014**
Cumulative GPA: **3.78/4.00**

Languages

- Types/FP, Kotlin/Java(Android), Swift(iOS), Go/Appengine, TypeScript/JavaScript, sh(*nix), Git.
- Dabbling in PureScript, Haskell, Rust, Scala, Ocaml, LaTeX.

Experience

Highlight - San Francisco, CA *Nomadic Software Engineer* **2014-2016**
- Architected + implemented a huge chunk of Roll + Shorts apps (`tryroll.com` / `tryonshorts.com`) since their inceptions; helped shape the product and codebases across Android in Kotlin, iOS in Swift + React native in Typescript, and AppEngine (server) in Go.
- Cool stuff: Algebraic Caching, FRP-Rx UI (all platforms), Lazy-loading Camera Roll Cards, Upload Stream, Pure Declarative Edge Queries, Notification Engine, Simple Dependency Injection from Scratch in Kotlin, Delegated-Property UserModel in Kotlin, Feed Pipeline "Virtual Machine."

Mozilla - Mountain View, CA *Software Engineering Intern* **2013**
- Converted ADB to the Firefox Process for the FirefoxOS Simulator.
- Presentation: `https://air.mozilla.org/bringing-adb-into-the-firefox-process/`

Facebook - Menlo Park, CA *Software Engineering Intern* **2012**
- Pushed the limits of the Android API for Facebook Home.

Carnegie Mellon University *TA for 15-237* **2012-2013**
- Helped design the course "Cross-Platform Mobile Web Apps" (15-237), first offered in Fall 2012.

Qualcomm Inc. - Raleigh, NC *Interim Engineer* **2011**

Projects and Ideas

- **Fanatic Evangelizing of Typesafe Functional Programming:** **2015-2016**
  · Created Cyklic, a Redux/Cycle.JS-like UI framework, on native Android (unreleased iOS and React Native versions).
  · Cyklic talk: `https://realm.io/news/kau-lee-kase-reduxing-ui-borrowing-from-web/`
  · Solve client-side cache complexity with composable algebraic cache layers.
  · Encourage the use of functional idioms filter/map/bind through the creation of Kotlin+Swift extensions and types through protocols and algebraic data types.
  · Presentations (internal+external): `github.com/bkase/slides` and `slides.com/bkase`

- **Cloud Graphics Research:** **2013-2014**
  · Member of CMU research team investigating the use of massive scale cloud computing as a potential platform for future interactive graphics and simulation applications.
  · Developed Android client with associated NodeJS app server for interactive system, developed distributed system for parallelizing simulation using AWS.

- **Git Stu-Co:** **2013**
  · Co-taught student run course 98-174 on Git.

- **TartanHacks Mentor:** **2012 and 2013**
  · Assisted students who used Android and web platforms on their projects.

- **Mapyst/NavCMU:** **2010-2012**
  · Received a small undergraduate research grant (SURG) from Carnegie Mellon University along with three other freshmen.
  · Created an Android application to aid in campus indoor and outdoor navigation.
  · See `http://mapyst.com` for more information.

Honors and Awards

- *Self-Refining Games using Player Analytics* **SIGGRAPH 2014**
- Dean's List, Carnegie Institute of Technology **Fall 2010, Spring {2011,2012}**
- *NavCMU:* Yahoo! Undergraduate Research Award (First Place); **Spring 2011**
  IBM Undergraduate "Smarter Planet" Award; Johnson & Johnson Undergraduate Research Award