



# Lionel Seidman

iOS Engineer

I am a passionate iOS engineer with a sense of design and a strong entrepreneurial spirit. I love working on side projects, and finding ways to push the boundaries of what is possible on mobile devices. I'm particularly excited about projects that are very performance intensive, or that require 3D graphics or complex UIs.

✉ lionelseidman1@gmail.com

🌐 lionelseidman.com

## Education

**Carnegie Mellon University**, 2012

BS in Information Systems

Minor in Engineering Studies

**Stuyvesant High School**, 2008

## Skills

**Objective-C, Swift**, UIKit, Core Graphics, Core Animation, 3D graphics (using the Metal API), metal compute shaders, CPU and memory profiling, multithreading, networking, UX design, CocoaPods, unit testing, continuous integration, usability testing, provisioning, general debugging, agile, code reviews, App Store submission, In-App purchases, Firebase, git, HTML, CSS, JavaScript, Photoshop, Final Cut Pro, Motion, Facebook advertising

## Experience

**Creator of Skyscraper 4D** *Aug 2017 – present*

- This is an open-world sandbox game I created for iOS that allows you to design and construct your own buildings in a 3D city with a very high degree of detail and realism.
- The game uses the Metal API for graphics, and is aggressively optimized to deliver smooth performance, even on very complex buildings.
- The concept of the app is very unique, so everything in it was created manually, without the use of game engines or 3<sup>rd</sup> party graphics libraries.
- This began as a side project in early 2014, and in 2017 I decided to start working on it full-time. It is available on the App Store, and represents the most accurate reflection of my iOS work.

**iOS Developer at Hearst** *Oct 2012 – Aug 2017*

- At Hearst I helped to develop magazine and newsfeed apps for roughly 22 of their well-known brands; including Popular Mechanics, Car and Driver, Cosmopolitan, Marie Claire, and Harper's Bazaar.
- I helped to improve the user experience of these apps through performance optimizations, crash prevention, better image rendering techniques, and more graceful degradation on slow devices and slow or unreliable internet connections.
- I developed a way for magazine issues to be downloaded progressively, instead of as one large file, which allowed users to begin reading issues almost immediately after purchasing them.
- I helped to improve UI responsiveness and reduce stuttering by employing better usage of multithreading.
- I helped to ensure a consistent, high quality experience across a wide range of screen sizes and device types.
- Unfortunately, the apps we worked on have now been replaced by apps of lower quality, which no longer reflect the work of our team.

**Software Engineer at Gerson Lehrman Group** *Jul 2012 – Oct 2012*

- I worked as part of a 19-person team to develop HighTable.com; an online community designed to help business leaders and industry experts meet one another.
- I assisted in the creation of new site features, product prototypes, and helped transition the site from .NET to Ruby on Rails.

**iOS Developer at AD:60** *Summer of 2011*

- I helped to create and modify several apps; including Songza for iOS, Carleton U, and a custom iPad app used in the Alexander Wang flagship store in New York.
- Some key areas of focus included: interfacing with remote API's, integrating share functionality, Core Animation, UITableViews, CATiledLayers, creating a custom photo viewer, creating a custom implementation of Coverflow, Core Graphics, Time Profiler, Zombies, and diagnosing memory and performance issues.
- Songza, which I helped work on during its early stages, went on to become a very successful and highly rated app. It was eventually bought by Google, and was later shut down.