

Sihao (Ben) Lu

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EDUCATION

Johns Hopkins University, Baltimore, Maryland

May 2016

Bachelor of Science in Computer Science

GPA: 3.59, Dean's List

Relevant Courses: *Principle of Programming Languages, Networks, Algorithms, Distributed Systems, Parallel Programming, OOP, Database, Data Structures, Computer System Fundamentals, Probability and Statistics, Discrete Mathematics, Calculus.*

CODING EXPERIENCE

Apps on iOS App Store: *Independent Developer*

2011 - Present

- **JHU Politik** (<https://itunes.apple.com/us/app/jhu-politik/id584865810?mt=8>)
 - Developed a newsstand app for JHUPolitik magazine, a weekly opinion-based magazine published by JHUPolitik club. Can auto-download and notify user when new magazine comes. Featuring async networking and UICollectionView.
- **Metronome Classic** (<https://itunes.apple.com/us/app/metronome-classic/id525316600?mt=8>)
 - Created a realistic classical-looking metronome app with customizable tempo and time signature, which can also change tempo according to your tap. Currently has over 50,000 downloads. Leveraged Core Graphics and Core Animations.

Hackathons & Competitions

- **Qualcomm Tricorder XPrize** (<http://tricorder.xprize.org>, <http://www.aezonhealth.com>) **Jan. 2014 - Present**
 - Making iOS client and bringing the team into finalist of XPrize, a \$10 million global competition to stimulate innovation and integration of precision diagnostic technologies, helping consumers make reliable health diagnoses on mobile device.
- **Hophacks 2013 & 2014**, Johns Hopkins University, MD **Sept. 2013, Sept. 2014**
 - **2014:** Best Facebook API usage for Snapeep, in which players snap photos secretly their FB friends to "assassinate" them.
 - **2013:** Awarded first place for app DropMe, which allows users to drop anything onto a shareable, personalized map.
- **Microsoft Coding Challenge**, Johns Hopkins University, MD **Sept. 2013**
 - Won first place by solving 4 out of 6 challenging problems.

Open Source Projects on GitHub (<https://github.com/DJBen>)

2012 - Present

- **2048-AI-iOS:** An artificial intelligence for solving the famous 2048 puzzle game with over 95% success rate on iOS.
- **Photo-with-Secret:** An app that can embed a secret message into a photo without making any eye-distinguishable changes.
- **AsyncPhotoBrowser:** A high-performance network-based gallery that automatically caches the content. Written in Swift.
- **PM25-iOS:** A wrapper framework that exposes air quality data in 70+ Chinese cities written in Swift 2.0.

WORK & RESEARCH EXPERIENCE

Box, Los Altos: *iOS Software Engineer Intern*

May 2015 – Aug 2015

- Implemented multiple functionalities in Box Preview SDK that allows developers to integrate preview capabilities for 100+ types of files on Box into their own app with ease. Integrated support for iOS 9 multitasking feature into Box main app.

Johns Hopkins University, Baltimore: *Intro to Java Course Assistant*

Sept 2014 – Dec 2014

- Hold 4 hr/week office hours, grade assignments and instruct programming lab sessions to assist students understand the material.

Microsoft, Redmond, WA: *Software Engineer Intern*

Jun 2014 – Aug 2014

- Design, build and test a client simulator module for the Intune team, which reduces the overhead of allocating existing clients during automated testing and simplifies the product test cycle, reducing total test time for every time for at least 10%.

Johns Hopkins Housing Office, Baltimore: *IT Assistant*

Sept 2013 – Apr 2014

- Builds an iOS app with backend database server that facilitates RA to record room inspection and security check status.

LEADERSHIP & TECHNICAL EXPERIENCE

JHU Politik Club, Johns Hopkins University, MD: *Webmaster*

Oct. 2012 - Present

- Manages electronic version of magazine online and in the iOS app and back-end of the website.

First LEGO League Robotic European Championship, Istanbul, Turkey: *Team Leader*

June 2010

- Served as a representing team of China, received Team Spirit Award and placed in top 10 among 50 teams from different countries.
- Awarded first place in China National First LEGO League.
- Designed model of NXT robot capable of performing complex tasks on a designated field, programmed using LEGO MindStorm.

TECHNICAL SKILLS & LANGUAGE SKILLS

- Languages: Objective-C, Swift, C#, Java, C, C++, Ruby, Javascript, Python.
- Platforms, Clouds & IDEs: iOS, Windows 8 Phone, Parse, Apple CloudKit, Azure. Xcode and Visual Studio 2013.
- Native Mandarin Chinese speaker. Basic Italian.