

# Sihao (Ben) Lu

3201 Saint Paul St, Apt 117, Baltimore, MD 21218, USA | (443) 326-0422 | lsh32768@gmail.com

## EDUCATION

**Johns Hopkins University**, Baltimore, Maryland

**May 2016**

Bachelor of Science in Computer Science

**GPA: 3.56, Dean's List**

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

## WORK & RESEARCH EXPERIENCE

**Box**, Los Altos, CA: *iOS Software Engineer Intern*

**May 2015 – Aug 2015**

- Implemented multiple functionalities including multimedia, caching layer and networking 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 mobile app

**Johns Hopkins University**, Baltimore, MD: *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%

## INDEPENDENT DEVELOPMENTS

**Apps on iOS App Store:** *Independent Developer*

**2011 - Present**

- **Breathe China** (<https://itunes.apple.com/us/app/breathe-china-air-quality/id1038291632?mt=8>)
  - Displays real time air quality report of 7 pollutants for 200+ Chinese cities from both official and US embassy sources
  - Offers today's widget and Apple Watch app. Utilize Apple CloudKit as a decentralized backend for users to share info.
- **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

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

**2012 - Present**

- **AsyncPhotoBrowser:** A high-performance network-based gallery that automatically caches the content. Written in Swift
- **2048-AI-iOS:** An artificial intelligence for solving the famous 2048 puzzle game with over 95% success rate on iOS
- **CloudKitAPICache:** A framework that caches arbitrary API requests to iCloud to avoid hitting the call limit. Written in Swift 2

## 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**, Johns Hopkins University, MD

**Sept. 2013, Sept. 2014**

- **2014:** Best Facebook API usage for Snapeep, in which players snapshot their FB friends secretly 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

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

**June 2011**

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

## TECHNICAL SKILLS & LANGUAGE SKILLS

- Languages: Swift, Objective-C, Java, C, C#, Ruby, OCaml, Javascript, C++, Python
- Platforms, Tools & IDEs: iOS, Parse, Azure. Git and SVN. Xcode and Visual Studio
- Native Mandarin Chinese speaker, basic Italian