Jing Wei Li

iOS Developer, Graphic Designer & Engineer

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Summary

iOS developer with a published app on the App Store and two successful iOS engineering internships. Other skills include graphic design, UI/UX design, software engineering, front-end web design & electrical and computer engineering.

Education

AUG 2016 - MAY 2020

Rensselaer Polytechnic Institute (RPI) Troy, NY

Computer Science, Computer & Systems Engineering GPA: 3.17

Rensselaer Leadership Award Winner
Dean's Honors List for Fall 2016, Fall 2018 & Spring 2019

Relevant Courses:

COMPUTER SCIENCE:

Data Structures, Foundations of CS, Algorithms, Principles of Software, Programming Languages, Operating Systems & Software Design and Documentation

ELECTRICAL & COMPUTER ENGINEERING:

Embedded Control, CAD, Computer Components & Operations, Electric Circuits, Intro to Electronics, Intro to Engineering Design & Computer Architecture, Networks and Operating Systems

GRAPHIC DESIGN:

Intro to Graphic Design & Visual Design

Experience

MAY 2019 - AUG 2019

DraftKings. Inc, Boston, MASoftware Engineering Intern

- Developed iOS & Android frameworks to scan the barcodes in driver's licenses to report metadata for identification purposes.
- Combined the above Android & iOS frameworks into a Xamarin. Forms library and developed tutorials on doing such, which enabled DraftKings' Xamarin team to leverage the power of native mobile libraries.
- Added new features to DraftKings' iOS app's login flow using the VIPER architecture to improve user experiences.

JUL 2018 - PRESENT

Beatslytics

Independent iOS Developer

- Designed and programmed an iOS App with an Apple Watch counterpart, Beatslytics, and published it on the App Store. The app enables the user to rediscover their music with relevant analytics information about their music library.
- Currently a registered Apple Developer Program member.
- Designed & implemented a database schema to store analytics information on device, using the CoreData persistence framework from Apple.
- Developed a fully functional music player as a subset of features offered by Beatslytics, with the MediaPlayer framework.
- Gained familiarity with using iTunes Connect to publish an app to the App Store.
- Download Beatslytics today!

JAN 2017 - PRESENT

Rensselaer Union, Troy, NY Graphic Designer

- Apply graphic design skills in creating logos, posters, brochures, and other designs using Adobe Illustrator, Adobe InDesign and Adobe Photoshop.
- Networked with clubs & organizations to accommodate for special graphic design needs.

MAY 2018 - AUG 2018

Modernizing Medicine, Boca Raton, FL *Mobile Software Engineering Intern*

- Worked as an iOS developer to maintain three apps from Modernizing Medicine: PocketEMA, Telehealth and Kiosk, with Swift and Objective-C. These apps directly improve the lives of more than 160 million patients.
- Designed and implemented new features, new UI elements and carried out bug fixes while collaborating closely with a full-scale Scrum team.
- Implemented new features with major design patterns such as MVC, MVVM with Reactive Programming, strategy, singleton and delegation.
- Issue tracking with JIRA, networking with AFNetworking & HTTP debugging with Charles Proxy.

JAN 2018 - MAY 2018

RPI CSDT, Troy, NY

iOS Developer

- Worked as an undergraduate researcher to develop iOS apps for viewing 3D models in a classroom setting, using cutting-edge technologies involving <u>Augmented Reality</u>.
- Adopted core iOS frameworks such as SceneKit & Model I/O for 3D model viewing, and ARKit for the augmented reality experience.
- Created a networking layer to interact with REST APIs with NSURLSession and Alamofire.
- Designed UI and UX for the app from scratch.
- Used CocoaPods to integrate third-party libraries into the app.

JUN 2017 - AUG 2017

National MedTrans Network, New York, NY Customer Service Representative

 Customer service representative working between members, transportation providers, and health insurances to schedule trips to doctor's visits, using the MXIE software and a web app.

- Assisted customers with their inquiries, resolve complaints, and settled grievances.
- Gained exceptional communications skills as well as experiences in the service industry.

FEB 2016 - MAY 2016

Quadlogic Controls Corp, New York, NY AutoCAD Design Intern

- Drafted 10+ AutoCAD schematics of complex electrical products to enable smooth production of electronics.
- Verified 200+ service statuses of electrical products using TeraTerm in order to improve the satisfaction rating of the company.
- Assisted with EE processes such as soldering.

Projects

FALL 2019

Additive Manufacturing Capstone Project

- Collaborated with Mechanical engineers to design a 3D printer capable of printing with two different materials.
- Developed an algorithm in Python to generate toolpaths for 3D printing while mixing two materials at different ratios.
- Developed a macOS app using Swift and Xcode to simplify the process of connecting a Mac to the 3D printer.

SPRING 2019

S'more | Software Design & Documentation

- Developed an iOS music streaming app to combine the services of Spotify, Apple Music and YouTube into one app, so the user won't need to switch between apps.
- Built the app architecture with MVVM to reduce the size of view controllers.
- Created reactive data streams with RxSwift to interact with the Apple Music API.

FALL 2018

Smart Desk | Intro to Engineering Design

- Developed an iOS BLE app using Core Bluetooth to remotely control a smart home accessory.
- Utilized Adobe XD to design the app's UI and UX following Apple's Human Interface Guidelines.
- Built Arduino electronics to process the app's commands and carry out changes through hardware.

FALL 2018 - PRESENT

Automatic Door Control | RCOS

 Developed an iOS app to help disabled students open accessible doors on RPI campus.

FALL 2017

Embedded Control

 Utilized the SiLabs C8051 microcontroller to engineer a series of embedded systems, which include a Smart Car and a Gondola both capable of steering, driving and course correction, using the C language, A/D Conversion, I²C, PWM and PID control algorithms.

SUMMER 2017 - PRESENT

Personal Website

- Designed a fully-responsive personal website entirely from scratch in JetBrains WebStorm, using HTML, CSS, JavaScript, jQuery and ReactJS.
- Reverse-engineered the mobile game 2048 using ReactJS and the MVC pattern.

Skills

PROGRAMMING LANGUAGES

<u>Proficient</u>: Python, Java, C++, C, Objective-C, Swift, JavaScript & Kotlin <u>Familiar</u>: C#, Scheme, Prolog, Haskell, Scala & Shell Scripting

MOBILE DEVELOPMENT

<u>Apple Platforms</u>: iOS & watchOS Development with Swift & Objective-C, Xcode, AppCode, iTunes Connect & TestFlight.

<u>Android</u>: Android Development with Android Studio and Kotlin

iOS & watchOS Frameworks:

First Party: ARKit, SceneKit, LocalAuthentication,
MediaPlayer, Apple Music API, UIKit, MapKit, Security,
Core Bluetooth, Core Animation, Core Data, Core Motion,
Core Location, XCTest, UIAccessibility, WatchKit &
WatchConnectivity
Third Party: Alamofire, AFNetworking, Lottie, RxSwift,

Third Party: Alamofire, AFNetworking, Lottie, RxSwift SnapKit, PromiseKit, CocoaPods & Carthage

GENERAL ENGINEERING

AutoCAD, MatLab, PSpice, Siemens NX, Embedded Systems, Logic Design, Circuit Design & Arduino

SOFTWARE ENGINEERING

Agile & Scrum, Atlassian JIRA, Git & Vim

OPERATING SYSTEMS

Microsoft Windows, macOS, iOS, watchOS & Linux

WEB DESIGN

HTML, CSS, Sass, jQuery, ReactJS & Dreamweaver

GRAPHIC DESIGN, UI & UX

Storyboarding, Photoshop, Illustrator, InDesign, Lightroom, Adobe XD, Affinity Designer, Affinity Photo & Affinity Publisher

VIDEO EDITING

Premiere Pro, After Effects, Adobe Audition & Final Cut Pro

MISCELLANEOUS

Microsoft Office