JING WANG

2842 Arapahoe Rd

Lafayette, CO, 80026

jing.wang.co@gmail.com

401-580-6289

PROFILE

I am a passionate engineer. I love creating software that brings great user experience, fun , and productivity to people. I have 8 years of experience developing and shipping multiple iOS apps, especially apps that interface with wearable devices using Bluetooth Low Energy (BLE). I love to work in a fast paced, high growth environment and bring the best solution available to the business problem. When I am not coding, you can always find me on a hiking trail, in the ice rink, or in the kitchen.

My favorite tools are:
Swift, Core Bluetooth, UIKit, SwiftUI, Auth0, SpriteKit, CoreData, Alamofire, Python, Flask. GraphQL, WebSocket, Java, JIRA/Confluence, Asana, Agile Development, Figma, Sketch, Docker, Datadog, Firebase, TestFlight, App Store Connect, Arduino, Teensy, Neural Network, Statistics, Signal Processing

PROFESSIONAL EXPERIENCE

FIGUR8 Inc. (Boston, MA)   2/2017 - Present
Software Engineer II

As the first mobile engineer on the team, I helped bootstrap multiple native iOS apps from scratch for FIGUR8 wearable devices (using **Swift** and **UIKit**). I helped define and improve the agile workflow and build up the coding convention. Despite being an early stage company, I was a strong advocate for unit and UI testing. I mentored and led a junior developer to extend the UI test to cover all our major use cases. I was deeply involved in the development an internal SDK that encapsulates varies modules, e.g. a **CoreBluetooth** based **BLE** stack, a state machine for device management, and an **auth0** based login manager etc.. I was responsible for the full architecture of the application. I also worked closely with the design team and contributed to the UI/UX design (in **Figma** and **Sketch)**. I instrumented the app extensively with analytics (**Firebase, Datadog**) to provide detailed insights for sales and product teams. I didn't limit my work just to mobile development, but also worked with backend team and wrote a few **GraphQL** endpoints in **Python**.

FIGUR8 App (in App Store)
Built an app that guides users through pre defined activities (head bend, leg raise, walk etc.) to evaluate the extent of a patient's injury as well as their recovery journey. The app handled all the interactions with multiple wearable devices, including connecting and calibrating the motion sensors and syncing raw motion data to the cloud. Due to the complex data needed to assess the patient, the app required extensive navigation flows and logic. We developed multiple internal libraries to isolate API calls, BLE functions, and logic—making both development and testing easier.

Other Apps

I also helped build several apps for demo purpose or internal use. In **FIGUR8 Demo** app (in App Store), users can interact with different 3D visual models that are powered Unity3D and driven by wearable device. The app is used as a demonstration to show the potential applications of FIGUR8 wearable devices. **F8Flex** is game to showcase of our wearable, which is used as the game controller to control the object in a maze. **F8Sport** is another internal app used to evaluate an athlete's performance in different metrics. e.g. jump height, muscle symmetry etc. based on motion data captured by wearable devices.

EDUCATION

University of Rhode Island, USA

M.S. in Electrical Engineering   9/2011 - 12/2016

Northwestern Polytechnical University, China

B.S in Signal and Information Processing   9/2004 - 7/2008

M.S. in Signal and Information Processing   9/2008 - 7/2011

PUBLICATIONS

L. Chen, **J. Wang**, S. Yang and H. He, "A Finger Vein Image-Based Personal Identification System With Self-Adaptive Illuminance Control," in *IEEE Transactions on Instrumentation and Measurement*, vol. 66, no. 2, pp. 294-304, Feb. 2017

Z. Chen, **J. Wang**, H. He and X. Huang, "A fast deep learning system using GPU," *2014 IEEE International Symposium on Circuits and Systems (ISCAS)*, Melbourne VIC, 2014, pp. 1552-1555.

Jing Wang, Haibo He, Danil V. Prokhorov, A Folded Neural Network Autoencoder for Dimensionality Reduction, *Procedia Computer Science*, Volume 13, 2012, Pages 120-127.