



## Liao Song

### **Education**

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M.S. in Applied Mathematics - University of Minnesota, USA	May 2015
B.S. in Economics - University of Minnesota	May 2013

### **Skill**

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JAVA, Kotlin, Swift, Objective-C, Python, Ruby on Rails, JavaScript, Git, SVN

### **Experience**

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#### **Android Architect - Branch Metrics (Shenzhen, Zhuhai hybrid office)** 8/2021 – Present

- Be the only Android engineer in China to interface with a team of engineers in the US to solve bugs in the integration application search SDKs of major OEMs and communicate custom solutions
- Researched and analyzed the memory usage of the SDK and successfully reduced the memory by 20%.
- Led the research on the pros and cons of various IPC communication methods and implemented the initial solution, coached other engineers to implement the specific code
- Led research to optimize battery consumption by customizing JobScheduler startup policy

#### **Senior Android Developer - Sandbox Network (Zhuhai)** 10/2020 – 8/2021

- Lead a team of four developers to develop new features on a 50 million-download Android sandbox game platform
- Optimized database using repository model to make decoupled code available to other modules and to avoid development headaches to a certain extent
- Proactively proposed to use the industry's latest Tech stack, such as DiffUtil, WorkManager, and Kotlin concurrent, which greatly optimized the user and development experience
- Implemented an In-app-purchase tracking and retesting solution using WorkManager, which helped the company recover \$2,000+ per month in payment failure losses.

#### **Freelance Engineer (iOS app development for individual client in US)** 6/2019 – 10/2022

- Developed a thread-safe queue that allows jobs to be stored while disconnected and uploaded sequentially while connected



- Independently developed back-end RESTful API interface and MySQL database read/write operations using Swift and Vapor Framework

**Senior Android Development Engineer - (Bafu Computer, Shenzhen)**

9/2017 – 6/2019

- Led the development of payment application templates for Android POS machines, using MVP to minimize code coupling and improve code reuse to meet the needs of different overseas markets
- Developed a payment application SDK, provided a simple interface, and wrote detailed documentation.
- Led the development of a Bluetooth-related payment application, solving the stability and connectivity challenges

**Mobile Development Engineer - Ameriprise Financial (Minnesota, USA)**

9/2016 – 7/2017

- Worked on the team to develop and maintain new features for iOS and Android, including fingerprint login, money transfer, message notification, and management
- Took the initiative to develop an offline testing feature that allowed testing even when the server was often unstable, greatly improving the efficiency of testing

**Junior Mobile Development Engineer - Software for Good (Minnesota, USA)**

6/2015 – 9/2016

- E-commerce Android App, developed features including opening animation, swipe to unlock, cached images, tied to Stripe credit cards, etc.
- Retail Merchandising app: solved the problem of uploading images offline with retry mechanism