

Name: Joe Pan
Mail: shinren.pan@gmail.com
GitHub: <https://github.com/shinrenpan>
Blog: <https://shinrenpan.github.io>

Summary

iOS Engineer with over 10 years of experience developing iOS apps since 2009.

Types of apps developed:

- E-commerce
- Chat
- Bluetooth 4.0 or iBeacon
- 2D games
- Video streaming
- Music streaming
- MFI

Skills

Programming Languages

- Objective-C (2009 - present)
- Swift (3.0 - present)

Languages

- Mandarin (Native)
- English (Intermediate)

iOS Skills

- UI Development
 - Interface Builder (XIB)
 - Storyboard
 - Hardcoded UI
 - AutoLayout
 - Autore sizing
 - SwiftUI
 - Core Animation
 - SpriteKit
- API Communication
 - URLSession
 - gRPC with [grpc-swift](#), [connect-swift](#)
 - 3rd-Party Libraries (e.g., [Alamofire](#))
 - ~~NSURLConnection~~ (deprecated)
- Instant Messaging
 - XMPP with [XMPPFramework](#)
 - MQTT with [MQTT-Client-Framework](#)
 - Socket with [NSStream](#)
 - SignalR with [SignalR-ObjC](#), [SignalR-Client-Swift](#)
 - Live streaming with [ijkplayer](#), [HaishinKit](#), [ReplayKit](#)
 - VOIP
- Databases
 - CoreData
 - KeyChain
 - FMDB
 - Realm
 - NSKeyedArchiver/Unarchiver
 - Plist
 - NSUserDefaults
- Bluetooth
 - BLE 4.0 or iBeacon integrations
- Game Development
 - SpriteKit for 2D game development
- Version Control
 - Git
- 3rd-Party Package Management
 - Swift Package Manager
 - CocoaPods
 - Carthage

Work Experience

EVERVICTORY TECHNOLOGY

iOS Engineer 2023/09 - 2024/09

Developed and maintained the company's finance app, [video10](#)

- Developed using the [MVVVR](#) architecture.
- Managed projects with [XcodeGen](#).
- Integrated data using [SignalR](#).
- Customized UI.
- Used UICollectionView instead of UITableView for list UI.
- Wrote scripts to switch between dev, qat, and production environments.
- Implemented in-app language change.
- Maintained and expanded the company's KLine framework.
- Used CADisplayLink + RunLoop to ensure smooth cell updates during UICollectionView dragging.

Developed and maintained the [金田GT](#) app, [video9](#)

- Developed and maintained using Swift, with mixed integration of 3rd-party Objective-C.
- Implemented the [MVVVR](#) architecture.
- Managed projects with [XcodeGen](#).
- Implemented hidden UI features for app review.
- Customized UI.
- Integrated data using [gRPC](#).
- Optimized UITableView to avoid excessive reloads when receiving gRPC data updates, based on [Article2](#).
- Set up simple CI/CD using [Jenkins](#) and [Fastlane](#).
- Distributed apps via [Firebase](#) for dev/qat environments.
- Introduced Xcode 15's new [Asset symbol generation](#).
- Integrated interactions between HTML5 websites and the app.
- Managed dependencies with [Swift Package Manager](#) and [CocoaPods](#).

IM Software Development based on [Tinode](#)

- Refactored the iOS client from MVC to [MVVVR](#) architecture.
- Removed Storyboard and implemented UI using hardcoded methods for easier customization.
- Learned Golang and studied server-side code.

HengYuan Technology Co. Ltd

iOS Engineer 2022/04 ~ 2023/07

Developed and maintained the company's app, which included features such as short/long videos, comics, novels, games, live streaming, and chat. [video8](#)

- Took over and maintained a legacy Objective-C project from a colleague in China.
- Developed new features using Swift while integrating with Objective-C.
- Introduced [XcodeGen](#) for project management to avoid frequent Git conflicts.
- Researched the differences between [Tuist](#) and [XcodeGen](#).
- Led the gradual migration of the project from Objective-C to Swift.
- Implemented the [MVVVR](#) architecture for development.
- Removed unmaintained third-party libraries, replacing them with native APIs. Replaced [GCDWebServer](#) for local m3u8 playback with native APIs, based on [Article1](#).
- Wrote scripts for environment switching.
- Developed a comic reader and a novel reader.
- Integrated web and app interactions for games.
- Introduced a live streaming SDK from a partner.
- Coordinated with a third-party signing service to distribute the app without releasing it to the App Store.

Gamania Group

iOS Contract Engineer 2019/06 ~ 2022/02

Developed and maintained the [BeanFun](#) App.

- Collaborated with the team to introduce the [Clean Swift](#) architecture.
- Fixed existing bugs in Objective-C and refactored code using Swift. Developed new features in Swift while integrating with existing Objective-C code.
- Implemented extensive interactions between WebView and the app.

iOS Contract Engineer 2018/09 ~ 2019/03

Developed and maintained an in-house project management app that enabled employees to track project progress.

- Developed and maintained the app using Objective-C.
- Cached API data using [FMDB](#) to enable offline functionality.
- Implemented an image caching mechanism that first displayed thumbnails, then downloaded and displayed full-size images.

Wistron Software

iOS Engineer 2016/08 ~ 2018/03

Developed and maintained the [國泰人壽](#) App.

- Maintained the existing app by fixing Objective-C bugs.
- Developed new features using Swift.
- Gradually replaced Objective-C code with Swift through refactoring.

HOTELITYIN CO. LTD

iOS Engineer 2016/03 ~ 2016/06

Developed an internal management system app for hotel staff to clock in and send real-time messages.

- Implemented the app using Objective-C.
- Developed the chat feature based on [SignalR](#).
- Implemented location-based clock-in functionality using Core Location.

互聯網行動科技

iOS Engineer 2015/04 ~2016/01

Developed and implemented app ideas proposed by the company's founder.

- Implemented the app using Objective-C.
- Developed a chat feature based on [XMPP](#).
- Created game functionality using [SpriteKit](#).
- Developed an e-commerce feature.

PiPiMy

iOS Engineer 2015/01 ~ 2015/03

Developed the beta version of the C2C secondhand trading app [行動拍賣](#).

- Implemented the app using Objective-C.

Hiiir

iOS Engineer 2013/09 ~ 2014/06

Developed a templated app mechanism that allowed businesses to open stores via the app.

- Implemented the app using Objective-C.
- Developed the templated app architecture.
- Collaborated with backend developers to establish the templating mechanism.

iOS Engineer 2012/05 ~ 2012/08

Developed the beta version of [巷弄](#), a coupon-based app.

- Implemented the app using Objective-C.
- Managed memory and optimized performance.
- Used Xcode Instruments to detect memory leaks and other issues.
- Replaced AutoResizing with AutoLayout.
- Resolved UI performance issues, ensuring smoother interactions.

JamZoo

iOS Engineer 2012/11 ~ 2013/06

Developed a variety of apps for clients.

- Implemented apps using Objective-C.
- Refactored the chat mechanism in the [單身銀行](#) app, replacing polling with [MQTT](#).
- Researched other chat technologies, such as [XMPP](#) and Socket.
- Developed an in-house app for a car rental company with offline functionality, [video7](#).
- Collaborated with ITRI to develop an HTML5-based eBook reader app, integrating UIWebView for communication between the web and app.

Viamedia Mobile Corporation

iOS Engineer 2010/09 ~ 2012/02

Developed a variety of apps for clients.

- Implemented apps using Objective-C.
- Fetched data from APIs using NSURLConnection.
- Developed interactive apps using the Media Player Framework, [video3](#).
- Created games using UIKit, [video4](#), [video5](#).
- Implemented apps with downloadable skin functionality, [video6](#).
- Explored additional features like SQLite and BLE.

KeyStone Semiconductor Corp.

iOS Engineer 2010/03 ~ 2010/07

Developed and maintained an app connected to MFI hardware, [video2](#).

- Implemented the app using Objective-C.
- Developed new features such as online radio and local music playback.
- Implemented social sharing features for Twitter and Facebook.
- Gained experience with the [External Accessory Framework](#).

Education

Institute for Information Industry (III)

iOS Development Program (2009 – Six Months)

- Learned the fundamentals of Objective-C.
- Studied [Cocos2d for iPhone](#).

At the end of the program, collaborated with two other students to develop a rhythm-based game using [Cocos2d for iPhone](#), which won the Gold Award in the 2009 Digital Content Series Mobile Game Creation Competition.

Post-graduation, collaborated with academy classmates on contract development for a music app, [video1](#).

Chaoyang University of Technology

Bachelor's in Information Management (Evening Program, 2004/09 – 2007/01)

Kao Yuan University

Associate Degree in Electronic Engineering