

Lyu-Jhen 'Alice' Lai

Personal profile

I am an experienced software developer, who has a passion for great products and is keen to change my career path to the game industry. For me, mobile apps are about making life more convenient, but video games make life more fun and meaningful.

Portfolio

Steal a loaf of bread (PC) April, 2021

<https://sharemygame.com/@Arroz/steal-a-loaf-of-bread>

Dev Focus: Gameplay. (Mash up between Jean Valjean from Les Miserables and Enola Holmes the detective.)

Player Experience: Exciting.

Core Mechanic: Make your own decision.

Theme: The 18th century.

Core game loop: Player is shown text on what is happening in the world and must choose how to progress.

Tea time (PC) April, 2021

<https://sharemygame.com/@Arroz/tea-time>

Dev Focus: Creating assets.

Player Experience: Joyful.

Core Mechanic: The player needs to think of a number.

Theme: Cute, Japanese Style.

Core game loop: Guess what the number is, and give feedback for higher or lower.

Block Breaker (PC) April, 2021

<https://play.unity.com/mg/other/webgl-builds-43952>

Dev Focus: Level design.

Player Experience: Fun and quick reactions.

Core Mechanic: Break all the blocks.

Theme: Quirky and colourful.

Core game loop: Smash all the blocks without letting the ball drop, in order to progress to the next level.

Long March (PC) May, 2021

<https://alicejp.itch.io/long-march>

Dev Focus: Create an indie game from scratch.

Player Experience: Exciting.

Core Mechanic: Run and collect items.

Theme: Simple and play on a historical map.

Core game loop: Get from A to B, collect goodies and avoid zombie attacks.

I joined a Game Jam by myself and created the whole game from scratch. For this game, I was inspired by Taiwan's history, as it is interesting but not well known, specifically The Long March, when the Taiwanese party were fleeing mainland China to the safer island of Taiwan. I liked the idea of the player having to collect resources, rescue a captured general, and flee to an island of safety, which in turn made me think about escaping a zombie horde. After the game jam, I got some positive and constructive feedback, and I continued with it, working with musicians to improve the background music, sound effects, and purchased more tutorials to improve the game screen and game play experience.

Back Seat Tales (PC) Sep, 2021

<https://baumlos.itch.io/back-seat-tales>

Dev Focus: Team work.

Player Experience: Exciting.

Core Mechanic: To dodge the obstacles and collect the dialog bubbles.

Theme: Pixel art in the ethereal outer space.

Core game loop: Get from earth to the moon , collect dialog bubbles and avoid obstacles attack in a limited time.

I joined The Women in Game Jam 2021, where the theme was atmosphere. We came up with the idea of traveling from Earth to the Moon by Taxi. The idea was about the complaints the driver would probably get everyday. The role I had in this game jam was programming, mainly the spawning of the obstacles and animating the openings. The biggest challenges were; how to dodge the obstacles while simultaneously having the conversation, spawning the obstacles with random locations, and how to collaborate together. It was a fantastic experience, where I learned how to collaborate with other programmers, artists, sound designers and narrative writers in two weeks.

Pink Pinball (#Unreal #Blueprint, #PC) Nov, 2021

<https://lyujhenlai.blogspot.com/>

Dev Focus: Create a game following best practices with Unreal Engine, Blueprint and Perforce.

Player Experience: Exciting.

Core Mechanic: Don't let the ball get out of the pinball table, and also bounce to all the colliders.

Theme: Pinky.

Core game loop: Player gets points by bouncing to the colliders. When the game finishes, you type in your name, and the game will save it with your score. Then you can play again. The game keeps the top three highest scores to the hero board.

I followed the tutorial, *Unreal Engine 4: How to Develop Your First Two Games*, on Udemy, which reminded me of *Space Cadet*. It was a good experience with building and designing efficient systems for the game I enjoyed a lot when I was a child.

Technical Skills

Game engine: Unreal, Unity

Languages: Swift, C#, Objective-C, C, Java, Ruby, C++, Blueprint

Development Software: Xcode, Visual Studio

Version Control System: GitHub, Perforce Helix Core

Platforms: Blender, Photoshop, Illustrator, TeamCity, Fastlane, Firebase, TestFlight, Microsoft Azure, Jira

Technologies: RxSwift, RESTful/XML web services, SQL

Professional Experience

Aug 2020 - Present

Self-directed learning - Develop video games with C# and Blueprint

Completed "Complete C# Unity Game Developer 2D" on Udemy and continuing learning at 3D worlds with Cinemachine, lighting and timeline. I am proud that I was able to create decent terrain in Unity with the free assets from Unity Asset Store, and the result is incredible.

- * 2D/3D physics, collision, enemy wave spawning.

- * Create 2D tilemap and 3D terrain.

- * Create UI with autolayout.

- * Animate player and enemy with the timeline.

- * Create Prefabs and EditorWindow.

Achievements:

- * Built a few games from scratch with Unity and Unreal.

- * Design levels and gameplay.

- * Learned how to use Perforce as the version control system.

- * Mastered Adobe Creative suite and Blender.

- * Cowork SFX with other professionals.

- * Joined game jams. (Gamedev.tv Jam & The Women in Games Jam)

- * Came 2nd place in the coding challenge. ([Into Games 1st Coding Challenge](#) - [Swing Into Action!](#))

Aug 2018 - Aug 2020 iOS App Developer, WorldRemit, London, UK

My responsibilities were to maintain existing functions and build new features. In order to extend the flexibility of the existing codebase, we modularised lots of the old codes to make them easier to test and reuse. I worked closely crossing all different front-end devs to maximize the productivity of the backend service. In the company, there were about 100 other programmers. We learned from each other through knowledge sharing sessions in order to grow together and expand our knowledge in different areas. In Worldremit, I was working in a squad team alongside Android, Backend Engineers, User Researchers, Product Designers, Product Managers, QA Testers, Data Scientists and Business Analysts. For introducing our new features, we used the customisable A/B testing in the application, with the support from data analysis we could reduce the risks and turn off the feature, if they did not go as well as planned. I learned a large amount in WorldRemit. It truly has helped me to see what a big team can provide to the users, and how so many people's ideas can come together to create interesting features before they even reach the coding stage, which I then got to develop and implement. It was a great opportunity to learn and grow there and prepared me for working with multiple departments over the course of one project.

Responsibilities:

- * Develop an iOS (Swift) app (Fintech) with MVVM architecture.
- * Modularising the codes into separate frameworks.
- * Design the APIs to be in line with web and android platforms.
- * Support A/B testing.
- * Support analysis tracking.
- * Maintain CI/CD pipeline.

Achievements:

- * Learned Ruby language to support the UI test cases.
- * Swapping feature teams to support company's decisions.
- * Inline design team with UI Component Library over rebranding.

Jul 2016 - Jun 2018 Mobile App Developer, Eastpoint Software, Cambridge, UK

During my time in Eastpoint, my responsibilities were to help maintain and build mobile applications with native or cross-platform languages. The benefit of working at a start-up company was that it gave me the chance to learn essential skills included in each individual project. Such as, 'Gaia Alerts', an app that shows the relative location of each new event on a constellation map. We had a severe performance issue that it took too long to re-render the view while the user was consistently scrolling and zooming. In the end, we came up with an idea to limit the amount of highlighted alerts shown on the screen to speed up the UI work. With cross-platform language (C#), I was facing all kinds of UI challenges, as it is not designed to program customised UI layout. Working through these difficulties helped to improve my problem solving skills. And also got the C# Microsoft and Xamarin Certified Mobile Developer certification.

Responsibilities:

- * Develop iOS(Obj-C/ Swift/ C#), Android(C#), Cross-Platform(C#) mobile Apps.
- * Executed development under Dependency Injection (DI) technique and SOLID principle.
- * Provide high Unit/UI test coverage.

Achievements:

- * Developed 'Gaia Alerts' App (iOS & Android) with Xamarin.
- * Help with maintaining 'April Strategy' iOS (Swift) mobile App.
- * Support the team with several other projects, 'WM GLOSA'(West Midlands Green Light Optimal Speed Advisory) and 'Cosworth' (Professional motorsport telemetry for driving enthusiasts).

Mar 2016 - Jul 2016 iOS App Developer, CodersCode, London, UK

During my time at CodersCode, I worked on projects with limited time and budget, which really pushed me to develop my skills. It taught me how to negotiate with project managers, assess the time needed to

complete tasks, and allowed me to practise working very closely with team members to prioritise the features of the application to keep the client happy.

Responsibilities:

- * Develop an online money transfer iOS (Obj-C) mobile App.
- * Reference the Android App and reproduce it along with iOS design, coding guidelines.
- * Work closing with PM, designers, and other developers.

Achievements:

- * Produced reusable, extensible code and components to maximize the development efficiency.
- * Finished the prototype within time.

Jul 2015 - Oct 2015 Product Engineer, Chunghwa Picture Tubes Ltd., Taoyuan, Taiwan

It was useful to work in a large company (at the time), as it showed me the value even the smallest employee can make when working well as part of a team/department. Having to be the bridge between clients and engineers was not an easy task, because I knew the difficulties they were facing and how many tasks they had on their plates. This taught me great interpersonal skills and how to help the thoughts and opinions of not just the clients but also the engineers to get across. I also learned that sometimes you need to explain to the clients that this would be the best product that they could ask for with limited time and budget. This experience really helps me to understand the managers' job and how important it is to have a good and open relationship between engineer and project manager.

Responsibilities:

- * Help the team to provide customized automotive electronics.
- * Liaising between sales, engineers, stakeholders, and clients.
- * Explain the technical approach, report weekly development progress and estimate project schedule to the Japanese clients.

Mar 2014 - Mar 2015 Mobile App Developer, nanameue Inc., Tokyo, Japan

Nanameue was a very young company and as such everyone was very open and excited for the potential of mobile applications. There was a drive to make the company successful, and it showed me how to stay hungry and playful when it comes to learning. Working in a new and exciting environment with the language and culture boundaries taught me to throw away all prejudices and embrace the different perspectives people bring.

Responsibilities:

- * Build iOS (Obj-C) and Android (Java) mobile Apps.
- * Quality testing every pre-release version.
- * Final check all the translations matches the content.
- * Account manager for English/Chinese speaking clients.

Achievements:

- * Developed 'SlideStory' App (iOS) and 'MagicalTalk' App (Android)
- * Developed Lily 'Video SNS to share your precious "Moment" and enjoy memorable movies' App (iOS)

Jul 2013 - Feb 2014 Mobile App QA, OPTiM Corporation, Tokyo, Japan

Through testing over and over with different devices, I learned that there is nothing that isn't important, and to take your time and do it properly. I learned that clearly describing the testing cases, scenarios are the key elements of the test report, as it saves time to reproduce and debug issues.

Responsibilities:

- * Quality testing nearly 100 different tests within an MDM (Mobile Device Management) App.
- * Testing all kinds of devices: Android phones, tablets and Kindles.

Oct 2011 - Oct 2012

Firmware Engineer, Philips & LiteOn Digital Solutions, Taipei, Taiwan

Through my time in PLDS, I learned that real coding issues are very different from in the textbooks, and how to digest thousands of lines of code. I learned a lot from my mentor about how you shouldn't hesitate to rewrite the code, if you think it is not readable or robust enough. I also saw the value of spending time on team building, as you get a better relationship together. Then, it is easier to understand each other without taking the criticism personally. Working as an embedded engineer using the C language helped me to learn other programming languages.

Responsibilities:

- * Developing DVD/BD player system with C language.
- * Tuning the parameters in the control system.
- * Debugging the unstable devices.
- * Write the QA tests.

Education

Sep 2009 - Sep 2011

Master's degree, Optical Mechanical Engineering,
National Central University, Taiwan.

Sep 2005 - Jun 2009

Undergraduate Degree, Electronic Engineering,
National United University, Taiwan.

Certifications

Microsoft Certification 70-483 : Programming in C#

Xamarin Certified Mobile Developer Certification

Completion of Certification : Complete C# Unity Game Developer 2D

Skill & Interests

Language:

Mandarin (Native), English (Fluent), Japanese (Fluent), Spanish (Basic)

Interests:

Running, Mountain Climbing, Drawing, Playing Video Games, and Traveling.