

Contact

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Education

Date	School	Dept.	Degree	Major GPA
1998/09 - 2000/07	Tsinghua University	Computer Science	Master	89/100
1993/09 - 1998/07	Tsinghua University	Computer Science	Bachelor	86/100

Working Experiences

Date	Company	Roles	Notes
2022/01 - 2023/11	Free Lancer, Consulting	Technical Advisor Software Engineer DevOps	Rust, Bevy Engine, Unity 3D, Kubernetes, AWS, Concourse CI, Grafana, Glowroot
2019/04 - 2021/08	Some Funded Startup	Tech Lead Team Management Backend Administration	Mobile App, Android, iOS, Flutter, Backend, Java, Rust, DevOps, Kubernetes, Grafana, Clickhouse, Glowroot, Concourse CI
2016/11 - 2019/01	Free Lancer, Consulting	System Architect Software Developer	F#, Fable, Elm, C#, Unity3D, Real-time Online Game, Actor-Based Framework,
2015/09 - 2016/08	Mithril Game Studio	CTO Game Developer	Unity3D, C#, Game Frameworks, Performance, Team Management, Agile, Kanban,
2013/03 - 2015/03	Substantial Games	CTO Game Developer	Unity3D, C#, Game Development, Real-time Online Game, DataBinding Tools,
2012/07 - 2013/03	PettyFun Game Studio	Studio Manager Game Developer Game Designer	Marmalade, C++, Lua, IwGame, 2D Game, iOS, Android, Level Editor, Animation Editor, Managing Artists, Game Design,
2011/11 - 2012/06	Blingstorm (Beijing) Entertainment	R&D Director	Development Process, Managing Developers/Designers/Artists/QAs, Unity3D, NodeJS, Theme Support for Cocos2D,
2011/06 - 2011/11	MediaTek(Beijing) Inc.	Technical Manager	Android, Radio Framework, Git/Gerrit, Agile, Scrum, Meetings,
2006/01 - 2011/05	Exeweb Inc.	Team Lead Software Engineer	Training, Interviews, Project Management, Code Review, Python,

			Flex, iOS, Objective C, Cocos 2D, Javascript, Dojo, Twisted, Selenium, Auto Tests, High Traffic e-Commerce Web,
2002/04 - 2005/12	InfocuSoft Inc.	Chief Engineer	Java, Delphi, SQL Server, Eclipse RCP, Online Ticket Selling System, Shareware, Experiments,
2000/09 - 2002/04	Dept. of Computer Science, UCSB	Teaching Assistant Ph.D Candidate	TA, Screening Tests, Java Mobile Agent, Perl, Linux,
1996 - 2002/04	Artstoday Inc.	Software Engineer (Part Time as Sole One)	Java, Delphi, SQL Server, C/S, B/S, Online Ticket Selling System,

Project Experiences

Rust Projects (2021 - 2023)

<https://github.com/notation-fun/notation>

A musical notation related App/Game prototype using Bevy game engine. Show guitar tabs in a colorful way, support Midi and audio output, running on desktop and web platforms.

<https://github.com/edger-dev/dioxus-class>

Utility to define CSS constants for Dioxus easily, tailwindcss and daisyui implemented with it.

Technical Services for Client Projects (2022 - 2023)

Unity 3D performance improvement,

App/Service/Game Prototypes (Product Designer, Architect, Developer, Rust, Unity3D, Typescript) (2020 - 2021)

Did some experimental works to gather information for tech adoption, potential projects and for fun.

A realtime multiple users IO game, Unity3d for game server, C# with Orleans (virtual actor framework) for backends, HTML5 frontend in TypeScript on PixiJS, and communicating with FlatBuffer.

ORY Hydra based OpenID integration for existing account system, Rust based.

Fast Growing Mobile App Project (Tech Lead, Android, iOS, Java Backend) (2019 - 2021)

A copy-from-china type startup, mainly targeting South-East Asia, the product is a

short video rewarding kind of app, released on both Android and iOS platforms, currently has millions of daily users, and has tens of millions downloads already.

Joined the company as tech lead of a main backend module, later took over the whole technical management, re-organize the team, working with other roles to make the early product ready for fast growing that happened at the first half of 2020.

Setup technical guideline for backend team, adopt full testing environment, concourse CI for a docker based development workflow, later migrated to fully k8s runtime.

Lead the small backend team to support the backend pressure, sorting performance and stability issues in a timely manner, we use Glowroot, Grafana, ClickHouse for monitoring, analysis and alerting.

Lead a small team to developed a separate app using flutter, java, and C#, already released to Android and iOS market, making profits after 6 months in development, did both product design and system architect works.

Cryptocurrency Service Gateway Prototype (System Architect, Sole Developer in F#) (2018)

Prototype system to link to multiple cryptocurrency exchanges to gather real-time data, and do processes upon the data. Use F# for full-stack, server side running on Dot Net Core, client side trans-compiled with Fable, also did experiments on GUI application with Xamarin.Forms and EtoForms.

Created functional based actor framework to combine the reactive pattern and actor based framework, non-intrusive design that can run with other actor frameworks (such as Orleans or Proto.Actor or gRPC), utilize F# computation expression for code generation to remove boilerplate codes, fully type checked RPC communication. Partial codes on Github.

<http://blog.yjpark.org/blog/2018/08/12/functional-reactive-actors-in-fsharp/>

<https://github.com/yjpark/dap.core.fsharp>

<https://github.com/yjpark/dap.build.fsharp>

Real-Time Online Battle Arena Game (3D, System Architect, Main Developer) (2017 - 2018)

2 prototypes for a client, one 2D game, one 3D game, both use the framework codebase I created. Which includes generic abstraction for context (with properties, channels, and handlers), network (real-time automatically synced network based on naming convention), common game logic (battle, team, player, skill, buff...), can create complex logic in a short amount of time, and high quality.

Battle servers running on Unity3d for the benefits with physics support, and easy diagnostic. Lobby servers running on Dot Net Core with Orleans Actor Framework.

Also created very simple pipe-based string-typed scripts for hot-replaceable UI and Visual logic. (by limiting the power of the script, to make simple logic easier to be implemented)

Partial codes on Github (only the core context logic).

<https://github.com/yjpark/dap.core.csharp>

WeChat Mini App, and Html App/Game (System Architect, Sole Developer in Elm) (2017)

A couple of small projects running on WeChat platform, include one mini app for chat-bots based on scripts. Small online game and shop around it (the game itself was written in Typescript). Choosing Elm for the front-end logic, which was a very nice experience, led me to a more functional approach later, creating a few libs in Github.

<https://github.com/yjpark/elm-wx-app>

<https://github.com/yjpark/elm-wx-web>

<https://github.com/yjpark/elm-wx-app-websocket>

Wu Zhong Xian Jing (3D, Action Role Playing Game) (Performance Improvement) (2015 - 2016)

Fire-fighting for performance improvement, the game used an outdated UI framework (DFGUI), which has serious performance issues when number of visual elements increase, digging into the source code, eventually identifying the slowest point, and solving the issue with minimal code changes. Also redo part of the combat logic to improve performance and fix bugs.

Setup assets development process, lead the team for major Unity3D version updates and adopted GIT.

The game was beta tested on 2016/05.

Ember Conflict (3D Game, Development Tool/Framework) (2013 - 2015)

Architect, tech lead, and developer of all framework codes. Multi-players real-time online RTS game on mobile devices, Unity 3D, uLink network, design and develop framework for flexible combat design, MVVM separation for game UI and visual elements. The game was published on iOS 2015/06, and got featured in many countries twice.

<http://emberconflict.com/>

<https://itunes.apple.com/app/apple-store/id847340288?mt=8>

Day Day Birds (2D Game, Development Tool/Framework) (2012 - 2013)

Designer and developer. A simple 2D game on mobile platforms, iOS version published on app store since 2013/03.

Built on top of Marmalade, created a customized 2D engine based on IwGame. Created a full set of tools including level editor, animation editor, font/atlas converter.

<https://itunes.apple.com/cn/app/day-day-birds/id608802879?mt=8>

Movable Write (iOS Application) (2012)

Designer and developer. Handwritten App on iPad/iPhone, published on App Store since 2011/05, open sourced on Github now.

<http://blog.yipark.org/blog/2012/04/22/movable-write-open-sourced/>

Pf-GridView (iOS Library) (2011)

A grid view component on iOS, very clean API similar to UITableView, very good performance, used in real projects.

<https://github.com/pettyfun/pf-gridview/wiki>

Exoweb Mobile Development: (iOS Application, iOS Library, iOS Game, OSX Application) (2010 - 2011)

As the tech leader, working on iOS applications for clients using their online API to show complicated financial data and do transactions.

As a team member, working on iOS library codes to provide improvement on developing environments on push notification, in-app purchase and so on.

By myself, wrote a 2D ipad game in a short period of time as learning process on Objective C and iOS platform, [Bump or Die](#)

Exoweb Online Project: (Web Server, AJAX/Flash Application) (2006 - 2010)

In charge of newbies training for over a year, provide systematic training process and documents.

Took part in team management works intensively and provided several useful suggestions adopted in team works. e.g. pair code reviews.

Lead the team to build RIA with Flex 3 for the system, create a thin framework to use Selenium RC to test Flash components automatically.

Complete several other smaller projects as team leader and essential software developer, including RESTful API for third party, upgrading whole system from Debian Sarge to Etch.

Using both Dojo and plain javascript for better user experiences, dealing with multiple browser issues, improving Dojo's widget creation performance dramatically (dojo 0.3).

Using tags in HTML and javascript regular expression processing to get a rich user interface without increasing page data size.

Python performance tweak, improve page rendering speed more than 50% by optimizing old python codes.

Shareware Applications (Windows Application, Windows Game) (2005)

When we established InfocuSoft, we tried to develop some shareware software, we choose some small project to start, I wrote two small applications with Delphi 7, one is for photo sharing and the other is a puzzle game, using the GIF interface framework I built which supports visual tools and skin, they are just 1.x versions, not perfect, but runs well and looks good.

<https://sites.google.com/site/yjpark/downloads>

Other Projects: (Web Application, Desktop Application) (2004)

In InfocuSoft, I developed some other projects as well, including an online shopping system, a tag-based discussion board, they were based on a Java microservice framework I built, the structure is quite stable and easy to use. And I wrote a prototype for photo sharing with server support using Eclipse RCP.

Ticket Selling System: (Windows Client/Server System, Java Server and Applet) (1998 - 2004)

I worked on ticket selling system for several years, it's first used by Beijing Concert Hall, it's the first citywide ticket system in China, at that time, we have only 33.6kbps modem connection, My design of the system ensure that the system is working reliable and fast on that limited link. When we adopted this system for the 21th World University Games, and improved the system to 3-tier structure for scalability, the system supported dozens of stadiums and millions of tickets successfully during the periods. And developed an online ticket booking system with Java applet in 1997, users can select seats in real time, and checkout with online banking service.

Summary

I have great passion in Information Technology. Both innovative and practical in software development. Can learn new technology and adopt them in work fast. Easy to communicate and cooperate with. Responsible for my work.

Have experiences as team lead for a long time, helped many team members to learn and deliver high-quality codes, managed different sizes of projects, and been able to work with other roles together smoothly.

Expertise with Unity3d, C#, F#, Rust, Familiar with Flutter, Elm, Python, Swift, Objective C, Marmalade, C++, Lua, Flex, Javascript, Typescript, Elixir, Java, Eclipse RCP, Delphi, iOS/OSX, Linux, Windows, have rich experiences in Games, Applications, C/S, B/S, Servlet, Database and TCP/IP.

Other Information

Fluent oral and written English, CET 6, TOEFL: 623 (1999), GRE: 2130 (1999)

Hobbies

Playing guitar, reading, running,

Awards in University

1996 Outstanding Undergraduate Student Scholarship, Tsinghua University

1997 Guang Hua FellowShip, Tsinghua University

1998 Guang Hua Excellent Postgraduate Fellowship, Tsinghua University

1999 Third-class of Challenge Cup of Tsinghua University as team member

Sun Certified JAVA Programmer 1.1, Year Obtained: 1999

CANDIDATE: YING JUN PIAO

CANDIDATE ID: SP2578246

REGISTRATION NUMBER: DE3SYD0296

Links:

Github	http://github.com/yjpark
Blog	http://blog.yjpark.org
Chinese Blog	http://cn.yjpark.org
LinkedIn	http://www.linkedin.com/in/yjpark
Old Blog	http://yjpark.blogspot.com