Will (Haonan) Zhou

Software Engineer | AI Explorer | Practical Builder

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- Technically grounded developer with 10+ years of experience designing and shipping frontend architectures and scalable systems, from startup products to large-scale platforms.
- Proven track record of building modular UI frameworks and leading cross-functional delivery, turning complex requirements into maintainable, user-centric solutions.
- Experienced in C++, JavaScript, and Python, and in applying AI-driven tools to speed up prototyping and experimentation while keeping code quality and long-term maintainability in focus.

Experience

Independent Developer — Self-employed
Feb 2025 - Present

`Agile Development` `Python` `Javascript` `React` `NextJS`

- Continuously exploring emerging technologies and applying them to self-driven software development projects.
- Developing an AI-powered English learning application: Utilized large language models (**LLMs**) to build an interactive vocabulary learning tool. Designed a modular, scalable architecture to support future feature expansion and multi-platform deployment.

Quant Engineer — Shenzhen Zhongsheng Haoan Technologies Co Ltd
May 2021 - Jan 2025

`Python` `Full-Stack Development` `NextJS` `Cryptocurrency` `Quantitative Trading`

- Designed, developed, and maintained strategy analysis tools, trading support utilities, and automated trading systems tailored to investor and analyst requirements.
- Converted investment ideas into backtestable quantitative strategies using systematic modeling.
- Built **interactive dashboards** to visualize strategies and backtest results, enabling analysts to refine decision-making.
- Developed automated trading frameworks integrated with live trading platforms.
- Developed systems for investment **data collection**, processing, and management.

Software Engineer — Tencent
Sep 2013 - May 2018

`C++` `Cocos2d` `Shader` `Python`

- Collaborated across departments to align gameplay experiences with design goals and technical constraints.
- Consistently delivered high-quality features within tight timelines, demonstrating strong **problem-solving** and **project management** skills.
- Led a 4-person **UI** engineering team delivering all new in-game features and backend integrations for a top-grossing game (>$20M monthly revenue for several years).
  - Developed a scalable UI **framework** consolidating base panels, scene transitions, and interface management to support the rapid growth of in-game ui requirements, adopted by over 90% of all game interfaces under a single manager.
  - Designed unified **animation effects** with timeline event, allowing artists to fine-tune timelines independently and eliminating ~90% of engineer's work.
  - Created a visual effects component library with defined component standards, covering the vast majority of common components, with adaptive layouts that significantly reduced bugs caused by changeable content layouts.
  - Built an internal **prototyping tool** for designers to quickly assemble prototypes from existing components, cutting typical design meetings from half a day to about one hour, and removing the need for front-end engineer attendance.

Frontend Developer — Touchgame
Jul 2012 - Jul 2013

`Actionscript 3` `Starling`

- Co-founded a **startup** focused on developing a JRPG-style **web game**, successfully leading the project from concept to launch. Although the venture faced commercial challenges, it provided invaluable hands-on experience in game development and startup operations.
- Spearheaded the frontend development of a JRPG-style web game, from architecture to release.
- Utilized Flash ActionScript 3 and Starling (Flash Stage3D) to build responsive and visually rich gameplay interfaces.
- Implemented **GPU-based** rendering, enabling real-time display of hundreds of player characters in large-scale battles.
- Developed a **custom animation framework** for storytelling, allowing designers to fine-tune sequences using XML-based configuration.
- Gained practical insights into startup dynamics, including **rapid prototyping**, **team coordination**, and **iterative development.**

Game Engineer — Shenzhen 7Road Network Technologies Co Ltd
Oct 2009 - May 2012

`Actionscript 3` `Javascript` `Web`

- Worked on the flagship title DDTank, a popular 2D multiplayer shooting game inspired by the classic Worms series.
- Served as a Frontend Engineer specializing in gameplay **UI development** using ActionScript 3.
- Designed and implemented the Dungeon raid gameplay system, significantly improving player engagement.
- **Led a team of four** to fork and adapt the game for international markets, **integrating** with multiple third-party publishing platforms to expand global distribution.
- Contributed to cross-functional collaboration and localization efforts to ensure seamless deployment across regions.

Education

Software Engineering
— Sun Yat-sen University School of Software
Sep 2004 - Jun 2009

Skills & Tools

Engines and Frameworks

`ReactJS and NextJS`

`Unreal Engine` `Cocos2d-x`

Programming Languages

`JavaScript` `C++` `Python`

Knowledge

`Web frontend (HTML/CSS/JS)`

`Modern JS and NodeJS`

`Game development`

`Data structures and algorithms`

`Computer graphics`

`Database and cloud platforms`

`Microcontrollers embed development`

`Smart home devices`

Languages

`Mandarin (Native)`

`English (Fluent)`

`Cantonese (Intermediate)`