SiaoPing, Wei

Frontend Engineer

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PROFESSIONAL SUMMARY

Frontend Engineer with over 3 years of hands-on experience building modern, scalable web applications using React, Next.js, and TypeScript. Experienced in designing reusable UI components, implementing authentication systems, integrating AI-powered features.

TECHNICAL SKILLS

Languages	Frontend	Backend
JavaScript (ES6+), TypeScript	React, Next.js, Angular, Vue.js	Node.js, Express.js, MongoDB, Mongoose

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WORK EXPERIENCE

Front-End Engineer (Contract)

Industrial Technology Research Institute (ITRI), Taiwan — Remote   Oct 2024 – Jan 2025

- Developed an interactive simulation tool for spatial data visualization, focusing on **graphics rendering** and user interactions.
- Built a **2D** obstacle editing system using **Angular and Konva.js**, supporting multiple geometric shapes with drag, resize, rotate, and keyboard-based controls.
- Implemented **real-time 3D** obstacle previews using **Babylon.js**, synchronizing 2D canvas data with 3D representations for spatial visualization.
- Optimized **collision detection** and **boundary validation** using **SAT.js** combined with **grid-based** spatial partitioning to improve rendering performance.

Front-End Engineer

Enable Educational Technology Co., Ltd. — Taipei, Taiwan   Feb 2021 – Sep 2021

- Collaborated in a cross-functional team (Back-end, UI/UX, PM) to develop and maintain features for an online education platform (https://adl.edu.tw/hero/) serving over **930,000 students**.
- Developed a game character system and reusable UI components using **Vue.js and TypeScript**.
- Implemented a web-based browser game utilizing the **Phaser3** framework.

SELECTED PROJECTS

AI-Powered Travel Planner (Next.js & OpenAI) GitHub   May. 2024

- Developed a full-stack itinerary planner using **Next.js, TypeScript, and MongoDB**.
- Integrated **OpenAI GPT-4** to provide personalized, AI-generated travel suggestions.
- Implemented **drag-and-drop** functionality for intuitive scheduling and utilized **NextAuth.js** for secure authentication.

EDUCATION

National Taiwan Normal University (NTNU)   Bachelor of Education   Sep 2010 – Jun 2014

GPA: 4.0 / 4.0 (Ranked 1 / 30)