

Shu-Wei (Frank) Hsu

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EDUCATION

Cornell Tech (Cornell University)

M.S. in Information Systems with a concentration in Connective Media

Aug. 2023 – May. 2025

New York City, NY

National Taiwan University

Bachelor of Science in Electrical Engineering | GPA: 3.73/4.3 (3.66/4.0)

Sept. 2018 – Dec. 2022

Taipei, Taiwan

Course works: Computer Programming, Machine Learning, Algorithm, Data Structures, Computer Networks, Computer Architecture, Web Programming, Operating System,

SKILLS

Programming Languages: Python, Typescript, Javascript, HTML/CSS, C#, C++

Web Development: React, Nextjs, Node.js, Docker, GraphQL, TailwindCSS, Svelte, PostgreSQL, MongoDB

Other tools: React Native, AWS, Azure, Git, Auth0, Hasura, Docker, PayloadCMS, Figma, Storybook, SWR

EXPERIENCE

National Taiwan University, Office of Academic Affairs

Aug 2022 – Jan 2023

Frontend Engineer

Taipei, Taiwan

- Led a team of **9** in developing NTU's new course selection website, now used by **16,000+** students
- Increased data-fetching efficiency by over **50%** in the **Next.js** application by integrating the stale-while-revalidate strategy
- Enhanced efficiency by redesigning APIs, eliminating unused data fields, and optimizing resource usage
- Integrated NTU's **SAML** Single Sign-On (SSO) to enhance application security and align with institutional protocols

WOD.co

Feb. 2022 – July 2022

Software Engineer Intern

Taipei, Taiwan

- Launched a cross-platform workout TV app using **React Native**, adopted by two CrossFit gyms in Taiwan
- Enhanced gym owner control by developing a remote-control feature for the TV app, allowing operation via mobile devices using **Hasura** and **GraphQL**
- Reduced **50%** user input time by implementing **React**-based intelligent form auto-population
- Enhanced data visibility by creating an interactive workout history dashboard using the **React-chart** library, empowering users to analyze their fitness progress with ease

PROJECTS

NTUCourse Neo (React, Next.js, PostgreSQL, Express.js)

A redesigned course-planning web service for students at National Taiwan University

- Assisted **5000+** students in course planning and gained **1500+** registered users
- Won the 2nd best team project of 2021-Fall Web Programming Course
- Enhanced maintainability and readability by rewriting the entire codebase from **JavaScript** to **TypeScript**
- Applied Scrum Project Management for continuous improvement in a team of 3 students
- Collaborated with the Office of Academic Affairs at National Taiwan University to develop a new course information system

Personal Blog (Svelte, PayloadCMS, GraphQL, Figma, Turborepo)

A place that talks about tech, documents learning notes, and shares my thoughts

- Employed **Turborepo** to streamline the development of backend (**Express.js**) and frontend (**Svelte**) applications, optimizing build times through efficient caching
- Implemented dynamic Open Graph metadata using **Satori** to enhance the visual appeal and context of shared blog posts on social media, boosting engagement and click-through rates

My Portfolio (React, Next.js, Figma)

A personal website showcases my skills, experience, and projects.

- Achieved PageSpeed score of **100** for mobile and desktop devices by utilizing **React Server Component**
- Leveraged Figma components for efficient, reusable designs in a personal website

SecurityCam (React, Next.js, MongoDB, MQTT)

A scalable and customizable security camera service with an auto alarm system

- Led the design of the system infrastructures and user flow
- Created a **Line Bot** server for user interactions, including camera configuration and real-time snapshots
- Developed a **React** frontend with **Auth0** authentication for reviewing historical camera images