TAKU - FullStack Engineer with 6 Years' Experience

Senior Frontend FullStack Engineer with 5 years of development experience, including 3 years using React. Skilled in React, NextJS, TypeScript, Python, and Cloud Technologies to create responsive websites that boost business growth and improve user experience. Familiar with Data Science techniques to use data insights for better performance and strategic decisions.

Contacts: Taku Yokutou / ZHUO YIDONG / 卓 弌棟.
snomiao@gmail.com | +81-090-9857-9102 | 235-0023 Yokohama, Kanagawa, READY to relocate.

Highlight Skills:

Languages/Frameworks: **TypeScript/JavaScript/Python/Golang** React/NextJS Node.js/Bun
DevOps & Cloud: **Docker/Kubernetes**, **AWS/GCP/Azure/Vercel/Cloudflare**, Terraform/Pulumi, **GitLab-CICD/GitHub-Actions**
AI & Machine Learning: **OpenAI-API/LangChain/LangGraph**, **RAG System/Weaviate**, **ComfyUI**, **Whisper/TTS/STT**, **Prompt Engineering**
Frontend: **React.js-17,18/Next.js-13,14,15**, **TailwindCSS**, Redux/Zustand, **Storybook/Chromatic**
Backend: **Node.js/Express.js/FastAPI**, **PostgreSQL/MongoDB**, **RESTful-API/GraphQL/tRPC**
Security: **HTTPS/SSL/JWT**, **CSRF/CORS/XSS**, **2FA/TOTP**
Design & Tools: **Figma/Framer**, **Git/GitHub/GitLab**, **Nginx/Caddy**
Project Management: WBS / **Backlog/Notion/Slack/Teams/GitLab**
Languages: **English/Japanese/Chinese/Cantonese** (Business Level)

Work Experiences

2024-09 - NOW Comfy-Org

Califonia, United State (Full Remote from Yokohama, Tokyo, Japan) | **FullStack Engineer**

2025-03 - NOW Comfy-Org (Full-time Contract <> K.K. Fellowship)

Project Overview

Leading multiple technical projects and responsible for the development and enhancement of ComfyUI and its related services.

Responsibilities

- **Registry.comfy.org Project Management and Development**: Using NextJS, flowbite, mixpanel, and achieving fully automated I18N with react-i18next.
- **ComfyApi Project Development**: Providing security and node management features using Golang and GCP.
- **ComfyCon Live Video Subtitle Tool**: Automated bilingual translation tool for live video subtitles using Whisper, ChatGPT, and TypeScript.
- **China Python Mirror Cache Service**: Building Python mirror cache service for mainland China using Aliyun, ObjectStorage, and Caddy.

Achievements and Initiatives

- Provided valuable services and tools to the ComfyUI community.
- Achieved automation of translation and subtitles in global project meetings, improving efficiency.
- Optimized infrastructure to ensure regional availability and accessibility.

2024-09 - 2025-02 Project Comfy-Org/Comfy-PR (Freelance)

Project Overview

Comfy-PR is a project that supports developers of custom Comfy nodes by assisting them in the process of publishing their nodes to the Comfy Registry. The project provides services such as periodic cloning of GitHub repositories, automatic updates, pull request creation, troubleshooting related to publishing, and follow-up.

Responsibilities

- Automating the cloning and updating of GitHub repositories, editing `pyproject.toml`, and setting up GitHub Actions.
- Creating and submitting pull requests to the original repository and troubleshooting.

Achievements and Initiatives

- Developed a CLI tool capable of executing pull requests and implemented automatic quality checks.
- Created a dashboard that visualizes project progress and can export data as CSV.
- Strengthened the community to promote collaboration and knowledge sharing.

2022-11 - 2024-08 OneHR

Shinagawa, Tokyo, Japan (40% On-Site, Hybrid Remote) | **FullStack Engineer**

My Responsibilities

Frontend Development: Built and maintained responsive user interfaces for multiple projects.
Backend Support: Provide backend technical support, improving performance and solving concurrency issues.
DevOps: Designed and implemented Gitlab CICD pipelines. Configured and managed Azure environments, ensuring smooth deployments and efficient infrastructure.

My Tasks and Achievements

2023-04 - 2024-08 **FullStack Engineer for Project ChatGAI**

- **Situation**: While ChatGPT was becoming immensely popular, it had significant limitations such as the inability to read user-uploaded files and the necessity to uphold user privacy. Additionally, there was a growing demand for an AI that could cater to companies' needs by leveraging their private business knowledge.
- **Task**: Create a scalable, secure chat app that utilizes clients' private information, with a Retrieval Augmented Generation (RAG) system.
- **Action**: I created the frontend using NextJS and designed the chat UI with Figma. Worked with the team to integrate a Python-based LangChain FastAPI backend, support backend to solving concurrency issues to improve performance (Frontend: React/NextJS, API Client Generation, WebStream API, Responsive Design / Backend: Python, LangChain, FastAPI)
- **Result**: Delivered a fast and interactive chat app where users can upload documents and receive relevant answers, surpassing performance and UX expectations.

2022-12 - 2024-08 **DevOps Engineer for GitLab CICD Preview/Review Workflow Pipeline for Multiple Teams**

- **Situation**: Previously, the design review process for frontend products involved creating meetings and screen sharing, which was very slow and inefficient. Designers and developers had to coordinate schedules, leading to delays in feedback and slowing down the overall workflow.
- **Task**: Streamlined the GitLab CI/CD process to improve efficiency by creating a web-preview system for internal designer reviewing.
- **Action**: Developed a CI/CD preview framework using GitLab CI. Automated testing, building, and deployment using Cloudflare Pages. Implemented Chromatic and Storybook for asynchronous UI component review (GitLab CI, Cloudflare Pages, Chromatic, Storybook).
- **Result**: Reduced manual review time and errors, boosted team productivity, and ensured timely completion of the web-preview system for a successful press conference.

2022-11 - 2024-03 **Frontend Engineer for Labor Management System**

- **Task**: Developing the frontend of a labor management system.
- **Action**: Build a scalable and maintainable frontend architecture. Conducting code reviews for the team to ensure quality and consistency (React/Vite/Rollup/Vitest, Axios/react-query, TailwindCSS, ResponsiveDesign).
- **Result**: Improved the efficiency and performance of the application, fostered a collaborative development process, and ensured adherence to coding standards and best practices.

2022-02 - 2022-10 Monkai Inc. (now Drip Art Inc.)

California, US, (Full Remote from Shanghai, China) | **Frontend Engineer**

My Responsibilities:

- **Frontend Development**: Developed user interfaces using TypeScript, React, Redux, Victory.js, and D3.js.
- **Project Optimization**: Refactored project structure from Webpack to Vite to improve compilation speed and efficacy.
- **Data Analytics**: Managed Firebase user data analytics.

My Tasks and Achievements:

- **Task**: Developed a pomodoro status panel using TypeScript, React, Redux, and implemented graphical interfaces with Victory.js and D3.js, built into a Chrome Extension.
- **Action**: Refactored the project structure, using Vite, Mocha, Jest, and other technologies, reducing compile and reload time from 5-8 minutes to 30 seconds.
- **Result**: Increased team development and debugging efficiency by at least 20 times, significantly enhancing productivity. Additionally, the extension was released to the Chrome Extension Store, where it has served many users successfully.

2020-11 - 2022-01 Starhouse Information Technology Co., Ltd.

Shanghai, China, (2020-11--2021-02 On-Site, 2021-03--2022-01 Remote) | **Data Analyst**

My Responsibilities:

- **Web Scraping**: Developed web scraping systems and Chrome extensions, including creating and managing a data panel for scraping processes.
- **ETL System and Data Warehouse**: Constructed and managed ETL pipelines from MongoDB to MySQL and maintained MongoDB clusters.

My Tasks and Achievements:

- **Task**: Developed a daily web scraping system using NodeJS and MongoDB.
- **Action**: Built a data panel with React and FluentUI for scraping management and an intelligent ETL system. Developed a Chrome extension for quick scraping. (JSDOM, TypeScript, Monorepo, Jest, JavaScript, HTTP-Proxy, Nginx, Vite, Rollup, MongoDB, MySQL, Express.js)
- **Result**: The system has been stable for 22+ months, extracting data from over 10 financial asset sources, boosting data analysis efficiency.

2019-05 - 2019-10 (Internship) AiRiA: Institute of AI Chip Innovation, Institute of Automation, Chinese Academy of Sciences

Nanjing, Jiangsu, China, (50% On-Site, Hybrid Remote) | **Data Engineer**

My Tasks and Achievements:

1. **Cluster Build**: Managed Git code integration and Docker cluster deployment, significantly improving team code-merging and deployment efficiency.
2. **DB Manage**: Developed and optimized a distributed MongoDB + GridFS cluster.
3. **Data-Fetch**: Transformed a Python multi-threading crawler to a NodeJS multi-coroutine distributed crawler using JavaScript/Nginx/Express.js/Python. Increased concurrency by over 50 times for public facial data collection.
4. **Data-Cleaning for MTCNN**: Created a multi-coroutine distributed NodeJS crawler and coordinated data cleansing workflows to enhance MTCNN face-recognition tasks.

Education

2017-09 - 2021-06 Shanghai Institute of Technology

Shanghai, China | **Bachelor of Mathematics and Applied Mathematics**, Faculty of Science, Specialization in Financial Mathematics

- Major in Mathematics and Applied Mathematics, Focus on Finance and Statistics
- Minored in Marketing Micro-specialty Course
- 2019-06 | Mathematical Contest in Modeling, Honorable Mention (International) (MCM/ICM C Problem)
- 2019-02 | Asia-Pacific University Student Mathematical Modeling Contest 2018, Third Prize (International) (APMCM B Problem)
- 2018-08 | 13th National College Student "NXP" Cup Smart Car Contest, Four-wheel Photoelectric Group, East China Division Third Prize
- 2018-10 | Shanghai Creative Robot Challenge, Creative Group Third Prize
- 2018-11 | National College Student Mathematical Modeling National Competition, Shanghai Division Second Prize (City Level) (CUMCM B Problem)
- 2017-10 | **Lead** Our School's YiBan Technical Department and developed an LNMP and Express.js hybrid architecture [SIT Yiban New System], which served nearly 10,000 new students from 2018 to 2020, growing from 2 to 9. Many department members have continuously developed projects like SIT Kite (Rust / Actix-Web / RESTful API).

Projects

10 years of Efficient, Innovative, Collaborative Coding Life

2024-07 snomiao/sflow: Streams flow endlessly, sflow guides the way.

- **Situation**: Efficiently process large streams of real-time data.
- **Task**: Streamline data processing to enhance efficiency and accuracy.
- **Action**: Created **sflow** library, utilizing its chunking, filtering, and mapping features alongside robust error handling utilities. (Typescript)
- **Result**: Reduced processing time, increased data handling efficiency, and provided robust error management, significantly enhancing overall performance.

2023-01 snomiao/rime-snomiao Multilingual IME (EN+JA+ZH)

- **Situation**: I want to seamlessly typing across multiple languages, and learn languages by daily -life.
- **Task**: Develop an all-in-one IME for mixed inputs and real-time translation.
- **Action**: Designed and implemented the integrated IME solution with programming and linguistic algorithms. (Rime, Lua, Typescript, Yaml)
- **Result**: Enhanced productivity for multilingual users, achieving high user satisfaction.

2019-11 HTML Fluid Reformatting Chrome Extension: SNOREAD

- **Situation**: Readers facing difficulty reading long articles in narrow column layouts.
- **Task**: Create a tool to re-format long articles into a more readable layout.
- **Action**: Developed SNOREAD Chrome extension to analyze DOM trees and re-format articles into newspaper-like layouts. (Chrome Extension, Typescript)
- **Result**: Improved online reading experience with positive feedback from users.

2017-01 snolab/CapsLockX: Manipulate your computer like a hacker!

- **Situation**: Maximize productivity with efficient computer operations.
- **Task**: Enhance keyboard operations for complex tasks without frequent hand movements.
- **Action**: Developed CapsLockX to enhance editing, manage virtual desktops, simulate mouse actions, and more. (Golang+robotgo for mac, Autohotkey+Rust+Tauri for windows)
- **Result**: Significantly boosted productivity, saving time and reducing physical strain.

2014-04 Age Of Empires Resource Center

- **Situation**: Need for an organized platform to manage and share Age of Empires game resources.
- **Task**: Develop a comprehensive resource management system.
- **Action**: I Created the AOE Resource Center for uploading, managing, and sharing resources. (server/web-manager: LAMP + Linux + Apache + MySql + PHP, client: and cooperate with C# desktop client)
- **Result**: Effective resource management, well-received by the community, and provided valuable experience in database design and web application development.

Special Skills, Favorite Subjects, Points of Appeal, etc.

Special skills:
My special skills are programming and data analysis. I have been involved in many data projects and have experience developing complex front-end applications using TypeScript and React to enhance user experience.

Favorite subject:
The subject I was particularly passionate about during my university years was applied mathematics. I have been following the latest research on artificial intelligence and machine learning and have applied it to my projects. I have also actively worked on automation technologies, achieving efficiency and optimization in many projects. I am confident that I can leverage this knowledge and experience to address the technical challenges at your company.

Appeal points:
My appeal points include strong teamwork skills and excellent automation capabilities. In my previous job, I successfully completed multiple projects using CI/CD (Continuous Integration and Delivery) and automation to maximize team collaboration efficiency. Additionally, I am proficient in React front-end development and possess the ability to quickly and effectively solve problems.

Skills

Tech Skills:

Programming Languages: **TypeScript/JavaScript/Python** (6 years), **Golang** (3 years), C/C++ (4 years), AutoHotkey (6 years), PHP (4 years), Rust (3 months w/ AI assistance)
Frontend Frameworks: **React.js-17,18 Next.js-13,14,15** Redux/Zustand swr/useQuery/Axios (5 years), **Vite.js** (4 years)
Frontend UI & Styling: **TailwindCSS**/i18next (4 years), d3/echarts/framer-motion (4 years), **Flowbite/FluentUI** (2 years)
Frontend Testing & Build: **Jest/Vitest/BunTest** (3 years), **Storybook/Chromatic** testing-library (3 years), Rollup/WebPack/esbuild/ESModule (5 years)
Backend JavaScript: **Node.js/Express.js** (6 years), **Bun.js**/tRPC/Serverless (2 years), Auth.js (1 year)
Backend Python: **FastAPI**/Flask/asyncio/uvicorn (3 years), **LangGraph/LangChain** (3 years)
AI & Machine Learning: **ChatGPT-RAG-System/Weaviate/LangChain/LangGraph** (3 years), **ComfyUI/Whisper/TTS/STT** (2 years), **PyTorch** (2 years), **Prompt Engineering** (3 years)
DevOps & Containers: **Docker/Docker-Swarm/Kubernetes** (6 years), **Pulumi** (3 years), **Terraform** (3 years), **GitLab-CICD/GitHub-Actions** (4 years)
Cloud Platforms: **GoogleCloud/GCP** (4 years), **Azure** (4 years), **AWS** S3/Lambda/EC2/ECS/RDS (3 years), **Vercel/Cloudflare** (4 years), Aliyun/Tencent-Cloud (3 years)
Web Security: **HTTPS/SSL CSRF/CORS/XSS JWT** (5 years), **2FA/TOTP** (2 years)
Middleware & Servers: **Nginx** (5 years), **Caddy**/Certbot (5 years)
API Protocols: **RESTful-API/OpenAPI/Swagger** (5 years), **GraphQL/tRPC/Prisma** (3 years)
Network Protocols: **TCP/IP**/IOT-serial-port (11 years), **WebSocket** (6 years), Server-Side-Events (4 years)
Databases: **PostgreSQL/MySQL/SQLite** (11 years), **MongoDB/GraphQL** (6 years), **Redis/KeyV-DB** (2 years)
Data Processing: Excel (6 years), **NotionDB/GoogleSheets** (3 years), **Pandas** SQLite/CSV/XLSX (3 years)
Design & Prototyping: PowerPoint (6 years), **UML/Figma/FigJam/Framer** (3 years), **Excalidraw** (2 years)
Version Control: **Git/GitHub/GitLab** (5 years), **CI/CD Pipeline Management** (4 years)
Operating Systems: **Windows** (11 years), **Linux/Debian/Ubuntu** (8 years), **MacOS** (4 years)
Tech Ecosystem: **MERN/LNMP Stack** (6 years), **Vercel/Cloudflare** (4 years), Arduino/RaspberryPi (4 years)
AI-Assisted Development: **Claude/Copilot** (1 year), **AI Code Generation/Refactoring** (1 year), **AI-Powered Automation** (2 years)

Soft Skills:

AI Texting/Coding: [Text]: Prompt Engineering, [Code]: Codemod, Refactoring, Unit Tests
AI Media Process: [Voice]: TTS/STT/ASR | [Image/Video]: ComfyUI
Software Development Practices: TDD, CI/CD, Waterfall, Agile, Test Automation, Code Review
Passionate: Passionate about **solving practical problems** at any level with the improving technologies.
Communication: English (Business-Level), Japanese (Conversation-Level), Cantonese/Mandarin/Chinese (Native)

Contacts

Contacts: @snomiao / Taku Yokutou / ZHUO YIDONG / 卓弋棟

- **Email**: snomiao@gmail.com

- Telegram: t.me/snomiao

- Phone: +81 090 9857 9102

- GitHub: github.com/snomiao

- Homepage: snomiao.com

- Location: 235-0023 Yokohama, Kanagawa, ready to relocate.

- Get This CV in https://cv.snomiao.com or scan the QR code below: