

SHUENY (SHUN-YING) WANG

Fullstack / Product Engineer • React • TypeScript • Node.js • Python • AI Integration
+49 1573 915 6090 • shuenyw@gmail.com • github.com/shueny • shueny.github.io
Achstetten (near Ulm), Germany • full work authorization (Aufenthaltserlaubnis)

SUMMARY

Fullstack and product engineer with 9 years of experience taking products from an ambiguous problem to shipped software: discovery with domain experts, data model, backend, frontend, and the AI layer. Design and engineering have been one job for me since university, so I own the architecture and the interface decisions together rather than waiting for a finished spec. Comfortable in React, Vue 3, TypeScript, Node.js, and Python, with production experience integrating LLMs into real systems where a human stays in the loop.

WORK EXPERIENCE

Independent Product Engineer | Contract

Mar 2025 – Present

Product Engineer | Remote

- Owned the full lifecycle of a national toxicology research platform (Nuxt 3, FastAPI): ran discovery sessions with scientists to define what data mattered, designed the API layer, and built custom Plotly.js visualization layers until raw chemical datasets became heatmaps and radar charts researchers could interpret without manual calculation.
- Scoped and delivered a 13-module enterprise asset management platform (DC Keeper). Evaluated three competing architecture approaches, designed a two-tier RBAC permission matrix (module-level access plus field-level masking for monetary data) across four user roles, and presented trade-off decisions directly to C-level stakeholders within a fixed budget.

VicOne, a Trend Micro company | Automotive cybersecurity

Sep 2021 – Feb 2025

Senior Frontend Engineer | Remote

- Owned the data layer of the VSOC security dashboard (xNexus) for high-volume vehicle telemetry. Used TanStack Query, Form and Table for data fetching and large dataset display, Zustand for state, and Zod for runtime schema validation. Proposed and led the migration from client-side filtering to server-side pagination when the original approach stopped scaling with data volume.
- Launched a Threat Intelligence CMS as the primary engineer, taking it from zero to a shipped product in two months. Defined requirements with security researchers, designed the content schema to match backend GraphQL contracts, and moved between frontend and backend as needed to ship without waiting on other teams.
- Designed a Python pipeline on a Wagtail (Django) CMS that read unstructured threat sources, parsed them, and auto-populated structured fields using OpenAI, with expert review before publish. Analysts shifted from entering every record by hand to triaging incoming threats, cutting content preparation time from hours to minutes.
- Consolidated four product codebases into an Nx monorepo with Storybook and Radix UI to unify the component library. Each team had been building its own UI independently, and the growing inconsistency was adding friction to cross-team work and slowing releases.
- Introduced a Cypress and Playwright E2E testing framework from scratch and integrated it into CI/CD. Manual regression testing time dropped by half, and the framework was structured so other engineers could add new test cases without needing guidance.

Synttro | Cross-border construction SaaS

May 2020 – Sep 2021

Senior Frontend Developer | Remote, Singapore team

- Worked directly with construction site managers and admin staff to map their approval workflows, then designed and built a no-code drag-and-drop form builder that solved recursive rendering for deeply nested field structures. Non-technical clients could deploy custom forms in minutes instead of waiting days for developer time.
- Replaced a paper-based approval process with a cross-platform electronic signature tool (Konva.js canvas, web and React Native). Field teams completed approvals on site without printing or courier, cutting turnaround from days to hours. Also took on UI/UX design so the platform stayed usable for field workers unfamiliar with digital tools.

Citiesocial | Curated lifestyle e-commerce

May 2018 – Aug 2019

Frontend Developer | Taipei

- Modularized Shopify themes to decouple content from code, so the marketing team could launch seasonal campaigns without engineering involvement for every change. Executed an SEO re-architecture across semantic HTML, metadata, and site structure; key products reached the first page of Google in time for the peak-season campaign. Mentored a junior engineer on component-driven development with Storybook.

momo.com | Billion-dollar B2C e-commerce

Aug 2016 – Mar 2018

Frontend Engineer | Taipei

- Refactored legacy mobile checkout flows on Taiwan's largest B2C platform, focusing on stability during high-concurrency peak traffic where even a small slowdown affected purchase completion for millions of monthly users.

Skyway Inc. & TUKEEN Inc. | Digital product studios

2013 – 2016

Graphic & Web Designer | Taipei

- Designed brand and marketing visuals and implemented the websites myself with HTML, CSS, and jQuery, catching layout and breakpoint problems at the design stage. This is where the integrated design-engineering approach started.

SELECTED AI PROJECTS

Pilotfit | RAG · LangGraph · multi-LLM · Python · pgvector

2025 – present

- Scoped, designed, and shipped a complete AI job coaching platform independently, with a dual backend (Express.js + FastAPI). Built a hybrid RAG engine on pgvector with weighted scoring (semantic, keyword, regex) to match user experience against job requirements. Implemented cost-aware model routing across Gemini Pro and Flash based on task complexity, reducing API costs by roughly 84%. Reached beta with real users and enforced per-tenant isolation with PostgreSQL row-level security.

EchoTrace | Real-time audio · Azure Speech · YIN / DTW

2025

- Built a browser-based pronunciation coaching PWA that turns a live audio stream into real-time pitch visualization, with a hand-implemented YIN pitch detection algorithm and DTW alignment engine, driven by adversarial testing on real edge cases.

SKILLS

Frontend: React, TypeScript, Vue 3, Nuxt 3, Next.js (Pages + App Router), HTML5, CSS3, Tailwind, SCSS

Backend & Data: Node.js (Express), Python (FastAPI, Django/Wagtail), GraphQL, REST, PostgreSQL (row-level security), Supabase, TanStack Query

Data Visualization: D3.js, Plotly.js, React Flow, Konva.js, GoJS, react-three-fiber, HTML5 Canvas, Unity (3D)

Architecture & UI: Nx monorepo, Storybook, Radix UI, design systems, component libraries, Atomic Design, responsive design

AI & Agents: OpenAI API, Claude API, Gemini API, LangGraph, RAG pipelines, pgvector, prompt engineering, MCP integration, Claude Code

Quality & DevOps: Cypress, Playwright, Vitest, Jest, GitHub Actions, Docker, CI/CD, accessibility

Languages: Mandarin (native), English (fluent), German (A1, in training)

EDUCATION

M.S. Information and Learning Technology, National University of Tainan

2009 – 2011

Thesis: first-person 3D virtual museum guide built in Unity. ZAB-recognized in Germany.

B.S. Computer Simulation and Design, Shih Chien University

2005 – 2009