

Suyu Cheng

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Authorized to work in Canada

Full-Stack Development · ERP/CRM Systems · React.js / Node.js

PROFESSIONAL SUMMARY

Full-stack engineer with 6+ years turning manual ERP/CRM business processes, material requirements planning, multi-stage approval workflows, asset management, sales forecasting, and commissions into web systems used daily across a multinational manufacturer, working directly against live ERP, PLM, and CRM databases. End-to-end owner in 2-3 person teams: stakeholder requirements (CEO, finance, procurement, factory floor), relational data modeling, SQL-heavy backends, frontend delivery, and rollout across four countries. Ships modern React.js / Node.js web products on the side: two live bilingual Next.js/TypeScript sites, a React 19 analytics dashboard, and a shipped Claude API assistant.

TECHNICAL SKILLS

Frontend: React.js (React 19 + Vite), Next.js (App Router), TypeScript, Vue.js 3 / 2, Tailwind CSS, shadcn/ui, D3.js, Recharts, i18n (next-intl)

Backend: Node.js (Next.js server runtime, Node 20), C# / .NET Core 6 / .NET Framework, REST APIs, MSSQL stored procedures

Databases: MSSQL (6 yrs production), PostgreSQL (Supabase), Oracle PL/SQL, relational data modeling, data warehousing

ERP/CRM Domain: ERP/PLM integration, MRP / BOM, approval-workflow engines, CRM pipeline and sales-commission systems, manufacturing operations

AI Integration: Claude API (@anthropic-ai/sdk), streaming responses, prompt caching, knowledge-pack guardrails, conversation logging and rate limiting

DevOps & Tools: Git, GitHub Actions (scheduled jobs), Vercel, Supabase, Linux (Ubuntu), Jira, Trello, Agile / Scrum

Languages: English (Professional), Mandarin (Native), Taiwanese (Native)

PROFESSIONAL EXPERIENCE

Seasonic Electronics | Senior Software Engineer

Taipei, Taiwan | Sep 2020 – May 2024

MRP Platform

- Rebuilt a manual, Excel-based material requirements planning (MRP) process into a full-stack web platform (**.NET Core 6 / Vue.js 3 / MSSQL**) unifying live **ERP** (inventory, POs, purchase requests) and **PLM** (BOM, material master) data across **~1,000 raw material SKUs**, leading requirement workshops with production planning, procurement, and factory leadership, and resolving material-code mismatches between the two systems in the data model.
- Implemented **BOM hierarchy traversal (C#)** and **position-aware alternate-material substitution (MSSQL stored procedures)** to compute multi-level material shortages on demand, with **role-based dashboards** for planners; cut the planning cycle from 3 days to under 10 minutes and turned undocumented factory substitution rules into structured data.

E-signature Workflow System

- Architected a **settings-driven approval-workflow engine (.NET Core 6 / Vue.js 3 / MSSQL)**: modeled the company org hierarchy (departments, reporting lines, deputies, approval levels) as relational data, with **stored procedures dynamically resolving multi-stage approval chains** per form type, applicant department, and **amount-based escalation rules**.
- Digitized **10+ paper approval workflows** (finance, procurement, general affairs, HR, engineering change) for **~150 employees across Taiwan, Europe, the US, and China**: configurable sign-off quorums (all / any / designated approvers), ad-hoc approver insertion, per-stage email notifications, and mobile approval for traveling executives, with approved results **auto-syncing into downstream systems**.

Fixed Asset Management System

- Replaced an Excel and paper fixed-asset workflow covering **~2,000–3,000 HQ assets** with a web platform integrating the **ERP fixed-asset module**: lifecycle state tracking (active / in-use / repair / scrap), **barcode and QR scanning input from handheld scanners**, and auto-sync from the e-signature workflow on approval; cut annual inventory data preparation from 5 workdays to under 0.5 day.

Digital Technical Documentation Platform

- Led a **three-person development team** to move the Document Control Center off Excel and paper, personally owning **database schema and query-logic design**, and delivering document-level access permissions and event-driven notifications on document creation and revision for R&D, factory, and procurement stakeholders.

ACTi Corporation | Software Engineer

Taipei, Taiwan | Sep 2018 – Aug 2020

- Delivered a **CEO-facing sales forecasting dashboard** querying **live ERP and CRM databases (.NET Framework / Vue.js 2 / MSSQL)**: win-rate-weighted forecast calculations with executive override, and interactive **drill-down from team rollups to project composition and linked CRM records**; used in monthly, quarterly, and annual performance reviews.
- Re-engineered a legacy, unmaintained **sales-commission engine** into maintainable **MSSQL stored procedures** handling multi-dimensional payout rules (**product model, country, order size, customer type**), with detail views enabling sales staff to self-verify payouts, a process finance and the CEO depended on monthly.
- Built **company performance trend dashboards (Highcharts / MSSQL)** unifying **CRM pipeline forecasts, projects, ERP orders, and shipments across two database schemas** into a single consolidated management view.

PROJECTS — REACT.JS / NODE.JS / AI

Portfolio Site with AI Assistant (live) (*Next.js App Router, TypeScript, Claude API (@anthropic-ai/sdk), Supabase Postgres*)

protfolio-web-alpha.vercel.app

- Shipped a **guardrailed visitor assistant on the Claude API**: streaming responses, prompt caching on a byte-frozen system prompt, zod-validated requests, a fact-locked knowledge pack with a standardized fallback line so the model never improvises, Supabase conversation logging with per-IP and global rate limits, and an admin insights page that surfaces unanswered questions as content gaps.

Toronto Blue Jays Fan Web (live) (*Next.js 16 App Router, TypeScript, Node.js, Tailwind CSS + shadcn/ui, D3.js, Supabase Postgres*)

bluejaysfanweb.vercel.app/en | github.com/Suyu0114/BlueJaysFanWeb

- Designed and shipped a bilingual (EN / zh-TW) baseball analytics site: server-components-first architecture, **Vercel ISR with an on-demand revalidation webhook**, custom **D3.js** visualizations (spray charts, pitch heatmaps, defensive positioning), and a daily **GitHub Actions** ETL refreshing a Postgres warehouse with idempotent backfills.

World Cup 2026 Prediction & Analytics Platform (live) (*Next.js App Router, TypeScript, Node.js, Tailwind CSS, Supabase Postgres, Python*)

wcup2026-analytics.vercel.app/en/bracket | github.com/Suyu0114/wcup2026-analytics

- Built a bilingual forecasting site presenting model predictions side-by-side with de-vigged market odds: **84 vitest tests** including golden-vector parity tests for Python to TypeScript ports, automated recompute via GitHub Actions, and versioned model releases switchable in the UI.

MLB Player-Performance Research Dashboard (*React 19 + Vite, Recharts, Tailwind CSS, PostgreSQL*)

github.com/Suyu0114/BaZi-MLB

- Built a **React 19** analytics dashboard over an **18-table PostgreSQL warehouse** (1,181 players × 10 seasons) for a pre-registered statistical panel study, fed by a 5-stage idempotent Python ETL.

EDUCATION

Humber Polytechnic

Toronto, Canada | Sep 2024 – May 2026

Ontario College Graduate Certificate, Information Technology Solutions with Honours

Relevant coursework: Intro to Database & SQL (90), Oracle Database Programming (PL/SQL), Oracle Data Warehouse Fundamentals (91), Machine Learning (96), Big Data 1 (96) and 2 (90), Business Intelligence (Power BI / Tableau)

National Formosa University | Bachelor of Business Administration

Yunlin, Taiwan | Sep 2011 – Jun 2015

ADDITIONAL INFORMATION

Chairperson, Employee Welfare Committee, Seasonic Electronics

Sep 2022 – May 2024

Coordinated employee activities, vendor partnerships, and internal engagement initiatives, demonstrating leadership and cross-functional coordination.

Representative Powerlifting Athlete, Yilan County Citizens Sports Games

2022

Squat 205 kg / Bench Press 120 kg / Deadlift 230 kg.