Huang Shihao — Senior Frontend Engineer

Huang Shihao / Male / Born March 1999
Hunan International Economics University / Computer Science and Technology
Bachelor's degree, Class of 2022

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Summary

- 4+ years; **Frontend Lead at HKQAI** for **MAN** and **MattVerse BDA** (built from scratch).
- **AI + desktop**: streaming chat, tool-call UI; Electron IPC, WSL / Docker / SSH runtimes.
- **Engineering**: layered monorepos, shadcn/ui design system; AGENTS.md-governed AI coding.

Target Roles

Senior Frontend / AI Application Frontend / Electron Desktop / Frontend Lead | Shanghai

Work Experience

Hong Kong Quantum AI Lab (HKQAI) (Dec 2024 – Present)

Frontend Lead | AI Agent | Electron | React | Vue 3 | Monorepo

- Lead the architecture of the product-family monorepo (5 apps); primary contributor.
- Run code review, conventions and releases; set per-module AGENTS rules for AI coding.

Shanghai Huwan Intelligent Technology Co., Ltd. (Sep 2023 – Sep 2024)

- Built a uni-app framework; shipped eJiaren mini-program (10,000+ users), fire-service apps.

Saimo (Shanghai) Industrial Internet Technology Co., Ltd. (Jun 2022 – May 2023)

- Qiankun micro-frontends for a chemical safety platform; React → Vue 3, component library.

Key Projects

MAN · AI Agent Desktop Client (Frontend Lead)

Electron 33 | React 18 | TypeScript | Vercel AI SDK | zustand | shadcn/ui | Turborepo

May 2026 – Present

Overview: Workbench to run and diagnose AI agents on local, WSL, Docker or SSH hosts.

- **Runtimes & IPC**: layered device workspace for SSH / WSL / Docker; resumable first-run setup; IPC returns only stable error codes.
- **AI chat**: slash commands, file mentions, edit-and-resend, queuing, tool-call steps, artifact previews; 3-level model picker.

- **Architecture**: design-system spec; split views into layered packages (2 apps + 26 packages).
- **Release**: electron-updater auto-update; fixed macOS arm64 / x64 dependency mismatches.

MattVerse BDA Platform + Website (Frontend Lead)

`Electron 33` `Vue 3.5` `TypeScript` `Pinia` `Dexie` `gRPC` `Vue Flow` `Nx` `Nuxt 3` Dec 2024 – Present

Overview: Battery R&D workflow and AI desktop platform (DAG pipelines); 2-person team.

- **Monorepo**: decoupled the workflow core; extracted grpc-core and `app.config` plug-ins.
- **Data layer**: gRPC over preload + IPC, streaming, chunked uploads; per-profile data isolation; Web Worker parsing.
- **AI chat (Vue)**: workflow-bound sessions; model picker, run steps, context usage, MCP setup.
- **UI & website**: UI standards, Tailwind v4 themes; Nuxt 3 download page, docs, i18n.

Enjoy Agents · Local-first AI Agent IDE (Personal Open Source, Solo)

`Electron 39` `React 19` `TypeScript` `AI SDK 7` `ACP` `MCP` `Turborepo` Aug 2026 – Present

Overview: Cross-platform agent IDE with approvals; BYOK. github.com/huangshh310/enjoy-agnets

- **Security boundary**: agent loop only in main; renderer uses Zod IPC contracts (lint-enforced); writes / shell need approval; keys in safeStorage.
- **Engines & remote**: 20 local agent CLIs (Claude Code, Codex, Gemini…) via ACP, model switch and engine handoff; SSH / WSL workspaces; macOS computer use (beta).
- **Engineering**: Turborepo (2 apps + 11 packages); AGENTS.md + domain specs for AI coding; 3-OS CI, tag releases, in-app updates.

Skills

AI: Vercel AI SDK, AI Elements, streamdown, MCP; Markdown / code / math rendering.

Desktop: Electron, electron-vite / builder / updater, ssh2, xterm.

Frameworks: TypeScript; Vue 3 (Pinia, Nuxt 3), React 18 (zustand); Vue 2, uni-app.

Eng & UI: pnpm, Turborepo, Nx, Vite, Vitest, Qiankun; Tailwind v4, shadcn/ui, ECharts.

Data: Dexie, Web Workers, chunked uploads; Node.js, gRPC, release scripts.