

I have spent 15 years building software inside hardware companies, split roughly evenly between smartphones and e-paper. I started as a telecom software engineer, moved into project management and product technical marketing, and finished as a software department manager at E Ink.

In October 2025 I started building my own products. Over the past year I have shipped 12 products and systems on iOS and the web using AI coding agents. I run every stage myself with AI: clarifying requirements with users, development, testing, and release.

What I am good at is turning AI into tools people actually use, not researching the models themselves. This year I also built my own testing process and development standards with AI. I know how hardware products are developed and run in the industry. Those two things are where I can help.

WHAT I BUILT THIS YEAR (OCT 2025 - PRESENT)

iOS project setup, specs, testing, and release pipeline

Built a reusable iOS project template: pre-commit / pre-push checks, an enforced TDD workflow, and a rule that nothing ships unless the full test suite is green. Every iOS project I run uses it. Developing alongside AI makes the human the bottleneck, so I turned the fixed parts of the process into skills and hooks the AI runs: if it does not pass, it cannot commit. App Store listing copy is a skill too. For submissions, fastlane chains build, signing, and TestFlight upload into one command on my own machine, tied to no CI vendor.

Security review for AI-written code

I have no formal security training, but I know it is the biggest gap between a demo and a real product. I use existing security-review skills as a fixed checklist, so nothing is missed just because I did not think of it that day. I also run two AI models against each other: one writes, the other looks for mistakes with a clean context. Where they disagree, I review it myself.

Cross-platform AI work system

A knowledge and development system I built myself: 56 task skills, 8 policy rule files, 2,567 structured knowledge cards. Because I did not want to be locked into a single AI vendor, I built it to run on all three (Claude, Codex, Gemini), with its own memory and self-review architecture, and every asset in git. The two most important rules in it: whoever does the work cannot be the one who verifies it, and any claim of completion must come with evidence.

Other products shipped

- **QuickTimeLapse** (iOS, live on the App Store): turns long videos into time-lapse clips for Reels
- **YourlyOmamori** (iOS): client management for insurance agents. Data and AI both stay on the device, because agent client records are sensitive
- **QuotationAssistant** (iOS): a quotation tool. Stores frequent line items, client records, and company seals, then prints for the customer
- **Rosetta Translator's Assistant** (Web): splits book content, translates in batches, exports in one format, and builds a style model from the translator's past work so the first draft carries their voice
- **Jixia Initiative website** (Web): Next.js 14 + TypeScript + Tailwind with Notion as the CMS, including a 65-question company health survey that generates a PDF report
- **Artist's personal website** (Web): the owner could not operate a website, so I moved them onto WordPress and wrote an SOP for the admin panel
- **PDF text darkening tool** (Web): a Python service; compared brightness, contrast, morphological processing, and thresholding

Workflow automation built for other people

- **Car rental dispatch and order system**: Telegram messages parsed automatically into Google Sheets and Calendar events; one command dispatches a car, and both sides stay in sync
- **Influencer / KOL matching proposals**: Google Forms intake, Apps Script fills a Google Slides template, one click produces the pitch deck and the closing report
- **3C repair reconciliation tool**: pulls mail from Gmail automatically, matches repair records in Google Sheets by IMEI, and outputs a file ready to import
- **Newsletter capture and digest**: scheduled fetching, conversion, storage, and deduplication, turned into knowledge cards for reuse

EXPERIENCE

E Ink Holdings (Apr 2017 - Oct 2025)

- Deputy Manager, Software Division II

Apr 2022 - Oct 2025
- Led the software team and grew it from 3 to 6; shared resource planning across a three-department group of about 20
 - POC design and development; company strategy planning and execution
 - Linfiny e-paper notebook** (the E Ink and Sony joint venture): helped the customer integrate Linfiny's and Readmoo's core technologies so users could read and write on the same device
 - MeeNote**: defined a lower-cost e-paper notebook system. A single USB cable connects an Android phone or Windows PC and mirrors the screen onto e-paper for long reading and writing, with notes synced back to the host

- Principal Engineer

Apr 2017 - Mar 2022
- Software development and applications for SWTCON, the e-paper driving controller. Explained it to customers, provided technical support, helped them integrate it into their platforms, unblocked problems by reallocating resources, and saw projects through to mass production
 - Product roadmap definition and schedule control. During the shift from black-and-white to color e-paper, produced reference designs for IoT, retail, and signage to shorten customer integration time

GIGAZONE International, a GIGABYTE subsidiary (Jan 2015 - Mar 2017)

- Head of Product Technical Marketing

Oct 2015 - Mar 2017
- Grew the team from 4 to 13 across Taipei and Shenzhen, covering user research, UI design, graphic design, and social marketing
 - User experience research, product feature specification, and App / web UI flow planning
 - Main products: **Pixar** e-paper photo frame (covered by TechNews, Mobile01, and Aotter Girls) and **MacEdge**, the first MacBook accessory to combine a protective case with a USB-C adapter

- Project Manager

Jan 2015 - Oct 2015
- New product planning, scheduling, and resource allocation

GIGABYTE Technology / GIGA-BYTE Communications, Mobile Product Center (Jun 2010 - Dec 2014)

- Section Manager / Project Manager

Jan 2012 - Dec 2014
- Ran three own-brand phone projects in four years, plus an education tablet project with **Qualcomm Brazil** (one design across two screen sizes)
 - Software feasibility assessment, bug tracking, schedule control, resource management; coordination across Shanghai, Brazil, and Taiwan
 - Before each kickoff, worked with the test department to prepare the full test plan, then negotiated headcount with each R&D department head

- Telecom Software Engineer

Jun 2010 - Jan 2012
- Android development, Modem / SIM / STK troubleshooting, GCF testing, MTBF stability test scripts, codebase management

SKILLS

AI application development	Build and ship native iOS apps, Python automation tools, and web projects with AI coding agents (Claude Code, Codex). Packaging repeated workflows into skills and hooks for AI to run, cross-platform AI rules and asset management, prompt design, semantic retrieval over a knowledge base (RAG).
Testing, quality, and security	Automated test process design, TDD, pre-commit / pre-push local guards, and a project rule that only a fully green suite may be committed. Security review of AI-written code (fixed checklist, two-model cross-check) and automated submission with fastlane.
Software and technical	Swift / SwiftUI (built with AI agents, app shipped on the App Store), Python, web front and back end, Git, Cloudflare Workers deployment. Android systems and mobile telecom (Modem / SIM / STK, GCF).
Product, project, and team	Scheduling, resource allocation, cross-department and cross-border coordination. Product specification, roadmap, business model and competitive analysis, user research. Building teams from scratch (4 to 13 people), hiring, goal setting, budgeting, and cost control.
Domain and tools	E-paper display technology and SWTCON driver integration, the full hardware path from design to mass production, consumer electronics development. Daily tools: Claude Code, Codex, Xcode, Git / GitHub, Notion, Figma, Obsidian.

EDUCATION

- M.S., Electrical Engineering, National Taiwan University of Science and Technology (Sep 2006 - Jun 2008)
- B.S., Electrical Engineering, Chinese Culture University (Sep 2002 - Jun 2006)