

King Joshua Marcos

Full Stack Developer | AI Products, APIs & Data Systems | Remote

Pangasinan, Philippines | Available for Remote Roles | marcosking1221@gmail.com | 0929 479 1598 | github.com/marcosmodly | marcosking742-dot.github.io/portfolio

PROFESSIONAL SUMMARY

Full stack developer who builds and ships AI products solo, from database schema to production deployment. Founded and runs ModlyAI, a live AI furniture platform where shoppers upload a room photo and preview furniture in 3D before buying. Also ships independent projects end to end, including Holdfast, a Telegram bot that turns voice notes into structured reminders, plus other tools spanning vector search, computer vision, and developer tooling. Uses Claude daily to prototype and debug, and is comfortable being the only person who understands a system from front end to database.

EXPERIENCE

Founder & Developer, ModlyAI | Remote | 2025 – Present

- Built and shipped an AI furniture platform (modlyai.tech) solo, covering front end, back end, database, and hosting on Vercel, taking it from concept to a live product.
- Own the full technology stack and day-to-day operations, architecture, feature builds, deployment, SOPs, reporting, and CMS/content pipelines, keeping the platform running and shipping without a team.
- Automated repetitive data workflows with AI-powered tools, cutting manual processing time by about 40 percent.
- Use Claude daily to prototype features and debug issues, shortening the time between an idea and a shipped feature.
- Wrote SQL queries to extract, validate, and cross-check data across system tables, catching inconsistencies before they reached reporting.

Engineering Department Assistant (Work Immersion), Municipal Government of Urdaneta City | Urdaneta, Pangasinan | 2020

- Assisted licensed engineers and architects during site visits and field inspections, supporting accurate on-site documentation.
- Encoded and filed technical documents, engineering records, and administrative paperwork, keeping departmental records accurate and easy to retrieve.

PROJECTS

ModlyAI (modlyai.tech · github.com/marcosmodly/modlyai) | Live product. Next.js, TypeScript, Claude API, 3D rendering

- Built an AI furniture platform end to end, taking a shopper's room photo through catalog matching, AI material customization, and 3D rendering, so they can preview furniture in their own space before buying.
- Owned architecture, backend, frontend, and deployment as the sole developer, taking the product from first commit to a live production site.

Holdfast (useholdfast.co · github.com/marcosmodly/holdfast) | Live product. Next.js, TypeScript, Telegram Bot API, Claude API

- Built a Telegram bot that transcribes a short voice note after you meet someone and extracts the person, what is happening in their life, and what was promised, resurfacing it as a reminder on the day it matters.
- Built an evaluation suite of twelve test transcripts run across four prompt versions, three trials each, taking extraction accuracy from 24/36 to 36/36 by moving date resolution, commitment verification, and message copy out of the model and into deterministic code, with 23 unit tests covering date handling.
- Found and fixed a persistence bug where ten of eleven captures silently stored nothing despite the bot reporting success every time, tracing it to a single Instant transaction where one rejected step discarded the person, the facts, and the commitments, and closing the gap between reported and actual success.

Second Brain (github.com/marcosmodly/second-brain-ai) | Next.js, PostgreSQL, pgvector, OpenAI embeddings, JWT auth

- Built a personal knowledge base with real semantic search, embedding notes on save and retrieving them by cosine similarity over pgvector, so related notes surface even without shared keywords.
- Built auth (bcrypt + JWT session cookies) and the Postgres schema from scratch instead of a managed auth/DB product, keeping full control over the data model and session security.

Screenshot to Website (github.com/marcosmodly/screenshot-to-website) | Next.js, TypeScript, Claude vision API, Tailwind

- Built a tool that converts a UI screenshot into working, responsive HTML and Tailwind, with a live split-pane preview that re-renders as you edit the code, so changes show up instantly with no build step.
- Verified the sandboxed preview mechanism (iframe srcdoc, script execution) with real headless-browser tests, confirming generated code actually ran safely instead of assuming it worked.

skillsmith (github.com/marcosmodly/skillsmith) | TypeScript, Node CLI, Claude API, npm package

- Built and published an open-source CLI that turns a description of desired expertise into a real Claude Skill, running a structured interview, drafting the files, and validating the result against written authoring standards, so the output stays consistent instead of a single unchecked LLM pass.

- Shipped the tool two ways from one codebase, a CLI that calls the Claude API and a native in-product skill that runs with no API key, backed by 19 unit tests and strict TypeScript, and confirmed it with a real npm-pack-and-install round trip.

Grandma's Lighthouse | *Godot 4, GDScript*

- Built a five-room puzzle game where the player restores color to a lighthouse, with save and load, room transitions, and audio synthesized entirely in code, shipping with zero external art or sound assets.
- Wrote a breadth-first solver that proves every room is solvable and free of soft-locks, using it as a design tool to reject bad layouts before building them, so every shipped room is guaranteed completable.
- Built a palette system that enforces measured contrast between floors, objects, and furniture, keeping every room readable in both the desaturated and restored states.
- Wrote 19 automated headless checks that catch parse errors, unreachable exits, and unsolvable layouts, keeping broken layouts from ever reaching a shipped build.
- Directed Claude Code as the implementer across the project and ran external playtests, driving three rounds of difficulty rework based on real player feedback.

TECHNICAL SKILLS

Frontend: Next.js, React, TypeScript, JavaScript, Tailwind, HTML5, CSS3, responsive UI development

Backend & Data: PostgreSQL, pgvector, InstantDB, SQL (schema design, querying, cross-checking production data), JWT/session auth

AI & LLM Integration: Claude API, OpenAI API (embeddings, vision), prompt evaluation suites, moving model output into deterministic code with unit tests

Deployment & Tooling: Vercel, Git/GitHub workflows, Telegram Bot API, REST API design, npm package publishing

EDUCATION

Bachelor of Science in Architecture (Undergraduate) | *Pangasinan State University* | 2021 – Present

Developed precision, structured problem-solving, and systems thinking through technical drafting and digital documentation. Self-taught in full stack web development and AI systems since.

CERTIFICATIONS

Computer-Aided Design (CAD) • Adobe Photoshop • Adobe Premiere Pro • AI Agent Building Course