

Carmen Mosquera

Software Developer · Mobile, Full-Stack & AI Applications · Orlando, FL

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Summary

Software developer who designs, builds and ships production apps end to end. Founder of Agubit Technologies and sole developer of The Days We Keep, a subscription family-memory app live on the App Store and Google Play in three languages. Built two AI content-production systems, a Flutter iOS app and a Next.js/FastAPI web platform, that plan, generate and publish social media for two brands every day. Has also delivered web, mobile and POS projects for local clients. Works across Flutter/Dart, Python, TypeScript, Firebase, PostgreSQL and multi-agent LLM pipelines. Brings eight years of operations, data and customer-facing experience from Amazon Air and Target, including training teammates on internal tools. Bilingual in Spanish and English. B.S. in Computer Science, 3.9 GPA.

Experience

Founder & Software Developer · Agubit Technologies Inc.

Orlando, FL · 2024 – Present

Independent software company building consumer apps, AI tools and client projects. Sole designer and developer on every product below. I also run social media for two brands, The Days We Keep and Noria Coffee, using the tools I built.

The Days We Keep · Flutter, Dart, Firebase, Cloud Functions (TypeScript), Drift/SQLite, Riverpod · thedaystwekeep.com

- Designed, built and shipped a subscription family-memory app for iOS, iPadOS and Android, live on the App Store and Google Play in English, Spanish and Brazilian Portuguese.
- Migrated the live production app to Riverpod 3 and an offline-first Drift (SQLite) database synced to Firestore, screen by screen, then removed the legacy code.

- Built server-side subscription verification in Cloud Functions for Apple and Google purchases, including the Play subscriptions v2 and Billing Library 8 upgrades.
- Designed family sharing with per-memory privacy, enforced in the data layer and in Firestore and Cloud Storage security rules.
- Fixed an N+1 query and added lazy asset loading to remove first-open lag; set up Crashlytics with obfuscated builds on both platforms.
- Owned the full product cycle: UX and visual design, store listings, releases, marketing website (Next.js) and social media.

Social Companion: AI content studio for iOS · Flutter, Dart, Firebase, SQLite, FFmpeg, OpenRouter, fal.ai

- Built a Flutter iOS app (about 78,000 lines of Dart, 40 screens) that plans, generates, edits and publishes social content for multiple brands.
- Architected three multi-agent AI pipelines (10 specialized agents) for story videos, carousels and story songs, with human approval at each stage and QA that routes revisions to a specific earlier agent.
- Integrated more than 20 AI models for text, image, video, speech, transcription and music, with per-call cost tracking and in-app test labs that compare providers before choosing production models.
- Wrote a lyric-to-audio alignment algorithm (longest common subsequence, tolerant of misheard words) that cuts video shots to each sung line.
- Built AI photo restoration and colorization that preserves facial identity, using a two-pass pipeline chosen after five rounds of model testing.
- Built on-device video processing with FFmpeg: stitching, transitions, Ken Burns animation, audio mixing and word-timed captions.

Social Scheduler: AI publishing platform · Next.js, React, TypeScript, Python, FastAPI, PostgreSQL, APScheduler

- Built a full-stack platform (about 36,000 lines of Python and TypeScript, 30 database tables) that plans, generates, schedules and auto-publishes Instagram, Facebook and WordPress content.
- Re-architected it from Streamlit and SQLite to Next.js, FastAPI and Postgres one screen at a time with no downtime, including a data migration script.
- Made unattended publishing reliable with a persistent scheduler daemon: on-the-fly posting times, catch-up after sleep, and weekly Facebook token refresh.

- Built a growth engine that pulls Instagram, App Store and Google Play metrics daily and turns an AI weekly review into tasks synced to the mobile app through Firestore.
- Secured it with JWT and bcrypt auth, Facebook OAuth with CSRF checks, and Tailscale-only remote access.

Client projects

- Built a WordPress and WooCommerce store with Stripe payments for an ER nurse selling her book on living with chronic pain.
- Built a citizenship-interview prep app for an immigration law firm, with civics study plus English reading, writing and speaking practice.
- Built a full-stack grocery inventory app for a local grocery business.
- Built a point-of-sale system for a local bar and lounge.

Process Guide · Amazon Air

Lakeland, FL · 2023 – Aug 2026

- Analyzed operational data and improved how internal applications were used, raising process efficiency.
- Supported system diagnostics, process automation and database fixes for the operations floor.
- Trained and supported team members on internal systems and tools.

Flow Control Room Analyst · Amazon Air

Lakeland, FL · 2022 – 2023

- Wrote a Python tool that processes about 35,000 package records from multiple uploaded files in 15 minutes, replacing a 4-hour manual process (about 94% faster).
- Monitored air-logistics systems and resolved technical issues in real time to keep packages moving between aircraft.

Tech Consultant Team Lead · Target

Orlando, FL · 2018 – 2022

- Led the electronics tech team, improving productivity and resolving day-to-day operational issues.
- Advised customers on phones, computers and other devices, matching products to their needs.

- Managed tech inventory and merchandising.

Education

B.S. in Computer Science · Southern New Hampshire University · January 2025 · GPA 3.9

Technical Skills

- **Languages:** Dart, Python, TypeScript, JavaScript, Java, SQL, HTML/CSS
- **Mobile:** Flutter, Riverpod, Drift/SQLite, iOS and Android releases, App Store and Google Play subscriptions
- **Web and backend:** Next.js, React, Tailwind CSS, FastAPI, REST API design, Spring Boot, Angular
- **Cloud and data:** Firebase (Auth, Firestore, Storage, Cloud Functions, FCM, Crashlytics), PostgreSQL, SQLite, data migration
- **AI:** Multi-agent LLM pipelines, prompt engineering, model evaluation, OpenRouter, fal.ai, image, video, speech and music models
- **Media and integrations:** FFmpeg, MoviePy, Pillow, Meta Graph API, WordPress REST API, App Store Connect API, OAuth 2.0, JWT
- **Tools:** Git, Tailscale, APScheduler, Crashlytics

Spoken languages: Spanish (native), English (fluent)