Tomas Morales

Founder @ Arbor Learning | AI Product Engineer | Former CTO
📍 Santiago, Chile — Open to relocation (San Francisco preferred)
✉️ tomas.morales.ber@gmail.com | 🔗 www.linkedin.com/in/tomasmb1 | ⬛
https://github.com/tomasmb

Summary

Founder of Arbor Learning — a digital PreU where learning finally makes sense. AI Product Engineer and full-stack builder with 10+ years delivering 0→1 products. **Former CTO (5 yrs)** leading 50+ projects and technical teams. At Alpha Schools (2 Hour Learning) designed and built **AI pipelines for collecting and transforming educational content into structured QTI 3.0 data**. Daily **power user of Claude Code and GPT models** for content generation, crawling, enrichment, and structured data transformation. Skilled at prototyping, iterating rapidly, and carrying AI systems through the **full lifecycle: ideation, model selection, productionization, and maintenance**. Experienced in designing **knowledge-graph-driven learning systems** that apply mastery-based learning and spaced repetition.

Experience

Founder & CEO

Arbor Learning — Santiago, Chile | Feb 2026–Present

- Building a digital PreU that turns a diagnostic into a clear, personalized mastery path using a granular skill tree ("árbol" de conocimiento).
- Designed **mastery-based learning system** with micro-lessons (10–20 min) based on worked examples + immediate practice.
- Built **adaptive practice engine** with feedback loops to teach and verify real comprehension.
- Implemented **spaced repetition + interleaving** for long-term retention and transfer.
- Starting with **PAES Matemática M1**, expanding to new modules as they mature.
- End-to-end ownership: product vision, architecture, engineering, and growth.

AI Product Engineer (Senior PM / Engineering Lead)

Alpha Schools (2 Hour Learning) — Remote | Feb 2025–Feb 2026

- Designed **generative AI pipeline** to create lessons and question banks from a knowledge graph (Math Academy Way), enabling mastery-based learning and spaced repetition.
- Sole technical owner of **Common Core Crawl**, an AI-assisted system that ingests and transforms standardized test data into **QTI 3.0 XML** for large-scale use.
- Built converters to transform PDFs/HTML into QTI, achieving **~100% accuracy** on supported question types.
- Integrated **AI prompting pipelines** for crawling, enrichment, transformation, and validation with Claude & OpenAI.
- Documented **prompt engineering strategies** ("brainlifts") after extensive experimentation to improve reliability and speed.
- Delivered end-to-end systems: architecture, coding, deployment, and iteration at startup pace.

CTO & Co-Founder

Tubesoft — Remote | 2020–2025

- Led a **15-engineer team**, hiring, mentoring, and building company-wide engineering culture and career paths.
- Directed **50+ full-stack projects** from idea to production across retail, finance, agronomy, and education.
- Developed **project starter templates and internal libraries** (monolithic apps with auth/payments, APIs, mobile/web clients) that saved **100–200h per project**, standardized codebases, and accelerated delivery — functioning as the company's **internal developer platform**.
- Built internal **team management platform** for tracking projects, time, costs, peer evaluations, and career growth, used daily by 15 engineers and 3 managers.
- Delivered scalable platforms using **React, Next.js, Node.js, AWS, GCP, Docker**.

Founder (part-time)

Ztudia — Remote | 2024

- Built a **generative AI tutoring prototype** with early GPT models to create personalized exercises and automated feedback.
- Applied **prompt engineering** to deliver adaptive content aligned with student weaknesses.

Freelance Software Engineer

Chile | 2015–2019

- Built a **personalized PreU platform** for adaptive test prep.
- Developed a **real estate market analytics tool** to collect and analyze property data automatically.
- Delivered full-stack projects end-to-end: requirements, coding, deployment, and client onboarding.

Tech: Ruby on Rails, Golang, Python, AWS, Elastic Beanstalk, PostgreSQL

Education

B.Sc. Industrial Engineering, Diploma in Computer Science
Pontificia Universidad Católica de Chile (top LATAM university)

Skills

- **AI & ML:** Generative AI, prompt engineering, Claude Code, OpenAI APIs, Anthropic APIs, knowledge graphs, mastery-based learning, spaced repetition, QTI transformation
- **Fullstack Development:** React, Next.js, Node.js, TypeScript, Prisma, tRPC
- **Infrastructure:** AWS (Lambda, RDS, S3, CDK), Docker, GitHub Actions, GCP
- **Databases:** PostgreSQL, MongoDB
- **Leadership:** Hiring, coaching, building engineering culture, 0→1 execution, product strategy

Side Projects

- **Arbor Learning (2026):** Digital PreU with mastery-based adaptive learning for PAES preparation.
- **Ztudia (2024):** Generative AI tutoring prototype (exercise + feedback generation).
- **Freelance projects (2015–2019):** EdTech and real estate analytics platforms.