Michael Fornal

AI Engineer

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SUMMARY

Technical founder and AI engineer. Built and runs GPTee, a live AI commerce platform, alone, and Ask Mike, a public RAG app on forn.al that answers recruiters' questions with cited evidence and publishes its evals. Works in Python and TypeScript with Claude Code, agents and evals. Before that, client-facing roles in capital markets consulting, fund finance and data science since 2020, running discovery and demos with banks, lenders and fund managers.

SKILLS

Languages: Python, TypeScript, JavaScript, SQL
LLMs: generative AI, Claude API, tool use, structured outputs, multimodal, Gemini, Replicate
Agents: Claude Code, subagents, MCP, agentic workflows, multi-agent pipelines, AI coding agents
Retrieval and evals: RAG, embeddings, hybrid search, reranking, eval harnesses, LLM-as-judge, guardrails
Backend: full-stack, FastAPI, React, Supabase, PostgreSQL, data modeling, webhooks, job queues
Infra: AWS, Docker, Linux servers, Vercel, GitHub Actions CI, automated testing, observability
Data: pandas, scikit-learn, entity resolution, data validation, Snowflake, BigQuery, Power BI, Excel
Business: stakeholder management, discovery calls, product demos, requirements, Salesforce, HubSpot

EXPERIENCE

AI Engineer · Jan 2026 – Present
GPTee (GPrintT LLC) · Marlborough, MA
Own company: AI print-on-demand platform, built and run solo

- Designed and run the architecture alone: two React and TypeScript storefronts, gp-tee.com and gpett.com, on one Vite build, 225 Deno edge functions and Supabase Postgres, deployed on Vercel.
- Generation pipeline: Claude writes the prompt, Gemini renders, Replicate cuts the background and Claude checks the result by vision.
- Added guardrails on generated art: a CLIP style match, a Claude vision judge (LLM-as-judge) and a print check run in parallel, and a second failure demotes the design and alerts Slack.
- Built an agentic workflow that screens niches with cheap search first and Claude last, then generates designs and creates products.
- Swapped the background-removal model after it cut scenery out of illustrations; the replacement costs 87% less per call.
- Made Stripe webhooks idempotent: each event ID is claimed atomically, so concurrent or retried deliveries create one order.
- Found agent-written database policies leaving 16 tables writable by the public key before launch; fixed and verified live.
- Built auth for Clerk tokens, which Postgres row-level security can't see: a shared JWT check now guards 158 of the 225 functions.
- Sole on-call for production, with observability on Sentry, PostHog and Slack alerts from 77 functions; fixed a checkout freeze with a 2-second auth timeout and a guest fallback.
- Directed Claude Code through 377 pull requests under a rules file that bans pushes to main and edits to merged migrations; reviewed the risky ones (auth, payments, database policies) by hand.

Business Development Lead · Apr 2025 – Jan 2026
Bridge Fund Finance · Boston, MA
Contract: UK B2B fund-finance marketplace startup, first US commercial hire

- Led the US market for a UK startup: ran discovery calls and product demos with lenders and fund managers.

- Turned US lender and fund-manager needs into requirements and roadmap input for the UK engineering team, such as fund admin integrations.
- Ran a lender's legal and compliance review of fund-data confidentiality with the UK engineering team, taking the deal to a pilot.

Consultant · Jun 2022 – Mar 2024
Capgemini Financial Services · New York, NY
Blockchain and capital markets practice, reporting to the EVP of Digital Assets and Capital Markets

- Led diligence for a global private bank's planned acquisition of a blockchain technology firm and presented the risks to its executives; the bank did not proceed.
- Coded the demo UI from Figma for a client's tokenized private-equity fund proof of concept; analyzed its transactions in Python.
- Ran technical due diligence on five custody providers and permissioned blockchains, recommending adopt, partner or pass.
- Wrote LLM primers and proof-of-concept designs for KYC/AML and trade surveillance in 2023.

Ops Data Scientist · Aug 2021 – Mar 2022
DIMO · Providence, RI

- Wrote SQL on Dune tracking on-chain token distribution and network participation for the operating team.
- Led onboarding for the first 1,000 customers onto connected-car hardware, from activation to live vehicle data.

Data Science Intern · Dec 2020 – Feb 2021
Lyndra Therapeutics · Cambridge, MA

- Built a Python pipeline from lab instruments into SQL and Power BI, replacing a manual Excel process.
- Trained scikit-learn models to catch prototype failures before physical testing.

PROJECTS

Ask Mike · Q&A grounded in a reviewed record of my work · 2026
Live: forn.al · Code: github.com/MichaelFornal/ask-mike · Python, FastAPI, SQLite FTS5, sqlite-vec, Claude API

- Built and runs the question box on forn.al: a recruiter asks about the work or pastes a job description, and every claim in the answer cites reviewed evidence.
- Built the retrieval eval first: 1,446 requirements from 100 job descriptions; on held-out ones, hybrid search with skill alias expansion beat keyword search on recall@10, 0.54 to 0.44 (paired 95% CI +0.076 to +0.130).
- Every claim passes grounding, honesty, slop and privacy gates before a visitor sees it, and an audit re-checks what a visitor would see; an answer costs $0.0130 on average.

Deal Terms Desk · live RAG over 406 merger agreements · 2026
Demo: deals.forn.al · Code: github.com/MichaelFornal/deal-terms-desk · Python, FastAPI, SQLite, Claude API

- Built the eval harness before the app: 1,406 questions from MAUD, scored against lawyers' labels, with BM25 as the bar to beat.

job-net · index of 8.64M job postings from 150,274 companies · 2026
Code: github.com/MichaelFornal/job-net (public subset) · Python, SQLite

- Finds unlisted job boards by mining Wayback CDX and Common Crawl archives and probing undocumented ATS APIs; 43 fetchers reach 135,302 boards.
- Merges duplicates on the job ID parsed from each apply URL across 24 ATS platforms, so one job on many boards is one record.
- Cut one pipeline from 68 hours to 14 minutes by telling dead ATS tenants apart from rate limits.

EDUCATION

B.S. in Data Science, minor in Business Administration · 2018 – 2022
Bryant University · Smithfield, RI
Coursework: Machine Learning, Data Mining, Statistics, Database Management, Big Data
Activities: Founding member, Blockchain Club; e-board, Data Science Association; mentor to student founders, Bryant Ventures