

Jeremy Burke

Forward Deployed Engineer · Agentic AI Systems · Client Delivery · Spatial Data

Brooklyn, NY · [LinkedIn](#) · [GitHub](#) · [Google Scholar](#) · [Portfolio](#)

Forward deployed engineer who embeds with clients, defines what success looks like, and ships AI and data systems their teams use every day. At Aretian I took a spatial-analytics company from 0 to 26 deployments across 5 countries, advising leadership at Barcelona City Hall, NEOM and Massport. Since 2024 I have delivered client systems spec-first with Claude Code, from on-site discovery to handover, and built LLM pipelines and agents with LangGraph, MCP and Langfuse evals.

PROFESSIONAL EXPERIENCE

Founder & Forward Deployed Engineer, Meridian XYZ, New York, NY · Mar 2024 – Present

AI and data engagements for real estate, restaurants, and finance

- **Guest Intelligence Dashboard.** Built a data visualization and AI dashboard, merging 44,874 guest records from four separate datasets (OpenTable x2, Toast, Mailchimp) into a single database to describe customer visits and spending patterns.
- Interviewed the CEO, managers, and staff to understand major pain points, and problems: software capabilities, data gathering systems, operational constraints to inform spec driven development for design and data viz platform.
- Held client design reviews to guide deployment with features including: 3-pass entity resolution (phone → email → fuzzy name, with a household guard), spend analysis, VIP scoring system, and a 90/180/365-day return-probability model.
- Deployed the software to the client's hosting platform with clear documentation, and held 3 followup meetings.
- **Meridian Urban Metrics.** Built a chat-based site-analysis tool for NYC developers: the current PLUTO release (~858K tax lots) merged with city open data on buildings, parks, land use and amenities into a parcel-level valuation model. Developers ask in plain language how location value changes from parcel to parcel, search for new project sites, and test how changes to the city would shift value. The agent (LangGraph, MCP) answers with cited figures.
- **OpenCitizen.** LLM research pipeline for the NYC mayoral race: 740+ sources from 23 outlets processed through bronze/silver/gold stages with provenance at each step, semantic search and citation enforcement (Claude, GPT-4, Gemini); 11 newsletters comparing 11 candidates across 16 policy proposals.
- **Native Catalyst.** Design a community center containing retail, coffee, coworking and educational spaces. Built a database of space utilization models from existing co-working spaces, completed geospatial trade-area analysis to identify ideal site locations, and delivered the campus concept and a booklet the client used with funders.

Co-Founder & Managing Partner, Aretian Urban Analytics & Design, Boston, MA · Jul 2018 – Feb 2024

- Co-founded a spatial-analytics firm and led a team of 5 (engineering, data science, economics, design) from 0 to 27 deployments in 5 countries, with 92% client retention and a 60% repeat-contract rate.
- Embedded with senior leadership at Barcelona City Hall, NEOM - Saudi Arabia, Massport and Tec de Monterrey to build analytics into planning decisions; 95% of recommendations adopted.
- Designed Aretian's analytics method and wrote its core code: economic complexity, research-collaboration network graphs and urban-form metrics on a PostGIS database across 450+ cities, used for site selection and district master plans.
- Codified delivery into reusable deployment playbooks, cutting client onboarding time 25% and raising project throughput 50% at flat headcount.

Researcher, Urban Innovation & Economic Development, Harvard SEAS, Cambridge, MA · Aug 2018 – Feb 2024

- 4 publications (95 citations), led by a *Journal of Business Research* paper with 68; co-authored *City Science: Performance Follows Form* (Actar D, 2024). Findings became Aretian's commercial products.

Earlier career, architecture (2011 – 2017): Coordinated a \$4B resort project across 15+ engineering consultancies ([Alon Development](#) & [BRU Architects](#)). Designed 5 single family homes, now occupied ([self run projects](#)).

SKILLS

Agentic AI: Claude Code, Claude Agent SDK, LangGraph, LangChain, MCP, RAG, Langfuse evals, LLM-as-a-judge

Cloud and data: AWS (Bedrock AgentCore), FastAPI, Supabase, PostgreSQL/PostGIS, DuckDB, pytest, Playwright

ML and geospatial: scikit-learn, entity resolution, network analysis, GeoPandas, MapLibre, deck.gl

Languages and front end: Python, TypeScript, SQL, R, React, Next.js

EDUCATION AND TRAINING

Harvard University, Master in Design Engineering · 2016 – 2018

Cornell University, Bachelor of Architecture · 2006 – 2011

AI FDE: Forward Deployed Engineer & Agentic AI Architect (Ed Donner): Agent architecture, evals, durable state, AI security, AWS Bedrock AgentCore deployment · 2026