

Tyler Bryan

DESIGN ENGINEER

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PROFESSIONAL SUMMARY

Design Engineer specializing in taking complex, expert-driven automation products from 0 → 1. Experienced in working directly with domain experts, from real estate developers to engineers, to translate judgment-heavy workflows and regulatory constraints, zoning codes, electrical code (NEC) compliance, into AI-powered products. Hands-on experience with agentic architectures, human-in-the-loop systems, and evaluation frameworks, with the technical fluency to work deeply with engineering while owning product direction and outcomes.

EXPERIENCE

Founder & Product Lead, CEO, *Primitive AI*

2023 – Present

- Designed, built, and shipped an end-to-end spatial AI automation platform from 0 → 1, orchestrating a system of **35+ specialized agentic tools** and an ingestion pipeline processing **15+ live municipal data streams**.
- Managed direct relationships with enterprise development teams overseeing **>\$1B** in active real estate portfolios, translating their zoning, feasibility, and land-use judgment into programmable system requirements.
- Defined and operationalized the human-in-the-loop boundary determining which steps (site analysis, massing generation) the AI could execute autonomously versus where the system required expert override, based on iterative validation with client teams.
- Ran an informal evaluation loop through direct client feedback: tested outputs against real deals, caught regressions, and refined logic before it reached developer decision-makers.
- Held rapid, iterative product cycles to professional engineering standards, documenting **159** structured architecture decisions along the way.
- Selected for the NVIDIA Inception program to accelerate spatial AI performance.

Product Engineer, BIM & Automation, *H.A. Sack Company*

2026 – 2026

- Owned the solo, 0 → 1 product lifecycle to design, build, and deploy an automation engine that automatically routes conduit networks across commercial buildings, replacing manual layout work, start to finish, in six months.
- Embedded directly with MEP engineering specialists to define and validate the constraint system separating routing decisions safe to automate from those requiring an engineer's judgment call.
- Ran continuous iteration cycles against real project edge cases surfaced by engineer feedback, a domain-expert-in-the-loop evaluation workflow refining the routing logic.
- Integrated the system independently into an active enterprise workflow, with no separate PM or engineering team, automating a step neither of two funded commercial competitors in the space has fully shipped, per my own competitive analysis.

Product Designer & Engineer, *Freelance*

2023 – 2026

- Translated commercial and operational constraints into production-ready web platforms and automation workflows for AI startups and academic research institutions.
- Engineered an automated property intelligence and lead-generation system for a residential contractor, integrating geospatial analysis, permit-tracking databases, and direct-mail campaigns at scale.
- Established a rigorous evaluation framework: built a **10-scenario automated adversarial red-team suite** (prompt-injection resistance, intrusion detection, auto-killswitch), securing a **100% pass rate** before trusting the agent with real customer data.

Co-Founder, *UBE Platform*

2021 – 2021

- Architected the software and the physical point-of-sale hardware for a blockchain-based remittance platform serving underserved small businesses, scaling from concept to a validated MVP.
- Led product requirements definition alongside founders and early merchant users; contributed to investor fundraising through product strategy and demonstrations that helped secure **\$250K** in pre-seed financing.

Prior Experience: Property Development Strategist, Greenpointe Development (2022–2023) • Architectural Designer, Artechnica (2021–2023)

• 3D Designer, Hubble Studio (2022) • Architectural Project Manager, DKN Architects (2020)

SKILLS & STACK

AI Product Engineering: Agentic system architecture, multi-tool orchestration, prompt and context design, reasoning about model behavior and failure modes

Evaluation & Trust Systems: Automated eval framework design, human-in-the-loop (HITL) boundary orchestration, adversarial red-teaming, regression detection

Product Infrastructure: Technical requirements definition, regulatory/code constraint modeling, domain-expert logic translation, roadmap ownership

Core Stack & Tooling: Python, TypeScript, Node.js, Next.js, React, PostgreSQL, GIS data systems, Cursor, Claude Code

Design: Figma, Framery, Blender, Rhino, Grasshopper, Revit, Unreal Engine, Illustrator, Photoshop, InDesign, ClickUp, Premiere Pro, After Effects, Lumion, Enscape, Octane, Microsoft Office

EDUCATION

UCLA • M.Arch, Architecture • GPA: 3.7 • *Cum Laude, Full Academic Scholarship*

University of Kentucky • B.Arch, Architecture • GPA: 3.6 • *Cum Laude, Dean's List Academic Achievement Award*