

Jake C. O'Donnell, P.E.

AI SYSTEMS BUILDER · BUSINESS DEVELOPMENT & COMMERCIAL · LICENSED P.E.

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Self-taught AI systems builder on a mechanical P.E. and business development foundation. First agent session **February 2026**; since then, a **70-job scheduled Claude fleet** with 10,000+ logged runs, an estimating tool indexing **608 historical projects**, four production websites, and an iOS app. Sells what he builds: active LOI book in carbon capture, \$3M in prior capital-equipment sales.

AI SYSTEMS BUILT SINCE FEBRUARY 2026

Automation Fleet. 70 scheduled jobs running headless Claude Code: LinkedIn drafting and replies for four brands, blog pipelines, executive briefings, KPI reporting, and health checks. 10,000+ runs logged since March 2026 at 89.3% success, with per-run metrics, failure taxonomy, and log rotation. macOS launchd, Claude Code headless, Playwright.

EFI Estimating Tool. Self-serve estimating app for an industrial equipment builder: extracted and indexed 608 historical estimates (2015 to 2026) with comparables and a line-item cost database. Python extractors, Node, Vercel.

BD Pipeline Platform. Real-time deal dashboard with live financial models, automation status, and plant KPIs ingested from HMI screenshots, plus scripted generation of client-ready proposals, decks, and proforma / IRR models. Alpine.js, Vercel, Redis.

Marketing Platforms. Four production websites with automated content pipelines, plus a gated team portal with auth and review workflow and CRM lead capture. Next.js 15, Postgres, Azure AD SSO, HubSpot.

Life Caddie iOS. Personal life-ops app (golf, kitchen, briefings) with push notifications and a Tailscale-served Node backend managed by launchd. SwiftUI, Node, APNs.

CORE COMPETENCIES

AI & Automation. Agent orchestration, scheduled headless LLM workflows, multi-agent patterns, browser automation, spec-driven development (26 dated design specs), reliability instrumentation.

Business Development. Origination, LOI and offtake structuring, account leadership, capital project economics, technology selection, F500 and PE-backed counterparties.

Operator & Technical. Plant startup and operations, P.E.-level mechanical design review, CO₂ capture, proforma and IRR modeling.

PROFESSIONAL EXPERIENCE

Vice President, CleanCycleCarbon

Charleston, SC · 2024 to Present

Carbon-capture subsidiary of EFI USA, the #1 US covered-lagoon biogas builder, 500+ installed systems since 1993.

- **Originated and structured the offtake and supply LOI book** across the project pipeline; built relationships across F500 industrial gas, beverage, ag, and PE-backed midstream counterparties.
- Lead the **technical and commercial evaluation** of the Cherokee carbon-capture project, including capture-technology selection (adsorption vs. cryogenic) and the underlying project economics.
- Took the **Lewiston CO₂ capture plant** from construction to beverage-grade qualified production (passed ISBT panels); delivered **484 tons** of merchant product in 2025.
- Built and operate the company's **AI toolchain**; everything in the section above runs in production today.

Sales Engineer, Fluid Equipment Solutions of New England

Boston, MA · 2022 to 2024

- Sold HVAC capital equipment to mechanical engineers and contractors; produced roughly **\$3M revenue** and **\$660K gross profit** in 18 months.

HVAC Design Engineer, BR+A Consulting Engineers

Boston, MA · 2019 to 2022

- Mechanical design on institutional and pharmaceutical capital projects, including cleanroom GMP fit-outs and university research facilities.

EDUCATION & LICENSURE

B.S. Mechanical Engineering, Clemson University

2018

Professional Engineer (P.E.), Mechanical: North Carolina and South Carolina (*NCEES Record 18-426-12, active*)

2024