

Zack DesJardins

Charlotte, NC · (910) 603-1644 · jackdsjrdns@gmail.com · U.S. Army veteran (Airborne)

Forward-Deployed / Applied AI Engineer — Agents · Guardrails · Evals

SUMMARY

Self-taught engineer, U.S. Army Airborne veteran. Two years designing, shipping, and operating production LLM agent systems solo: an autonomous outbound agent with a coercion-resistant send architecture, cryptographically signed action receipts, and zero unaudited sends. Every claim below is demonstrable on request — live demo, verifiable receipt chains, and a numbered engineering failure ledger.

PRODUCTION AI EXPERIENCE

Co-founder & Founding Engineer — membrAI (AI security venture, stealth)

Charlotte, NC · 2024 – present

- Built and operate “Betty,” a production autonomous outbound email/CRM agent (Zoho, Cal.com, Hunter.io): staged pipeline (prospect → qualify → personalize → adversarial review in fresh context → gated send) with defense-in-depth — deterministic, input-independent send gates; the model reviewer holds withhold-only authority, so a prompt-injected model cannot authorize a send. Zero unaudited sends.
- Designed an Ed25519-signed attestation-receipt chain for every governed agent action (send / handoff / block): append-only, vendor-neutral, independently verifiable — one attestation format shared by agent and product gateway.
- Hardened the release path: mock-mailbox regression sandbox exercises the full respond loop before any live credential is touched; DPAPI-encrypted secrets; deliverability-gated enrichment enforcing a <2% bounce policy.
- Implemented machine-checked AI-identity governance in production: AI-disclosure rules as machine-verified vault invariants, tiered autonomy with an auditable growth ledger, automated claims-drift monitoring against a declared source-of-truth order.

Independent AI Systems Engineer — multi-project agentic fleet

Charlotte, NC · 2024 – present

- Authored a cryptographically self-verifying document engine (hash-chained sections, machine-checked invariants, tamper-evident stamps, embedded 32-step selftest) used as the system of record across five workspaces — 600+ ledgered, verifiable changes.
- Operate a multi-project agentic fleet: deterministic, injection-immune intake/harvester, cross-project knowledge distillation, human-ratification gates, automated daily patrol with failure alerting.
- Designed ground-truth-first evaluation and calibration protocols for probabilistic systems: pre-registered resolution windows, uncertainty-gated promotion, replayable event-stream instruments, benchmark CI with frozen anchors.
- Built an adaptive training-curriculum engine (Bayesian knowledge tracing, Glicko-2 uncertainty gating) and a branded product design system (explainers, UX) — engineering plus the design craft to ship it legibly.
- Maintain an append-only engineering failure ledger: 59 distilled, provenance-tagged prohibitions enforced by adversarial review across all projects.

TECHNICAL SKILLS

- Core: Python (stdlib-first production code) · LLM agent architecture · prompt-injection defense & red-teaming · evaluation/calibration design · cryptographic verification (Ed25519, HMAC, SHA-256 hash chains)
- Platform: Windows automation (PowerShell, scheduled tasks) · API integration (Zoho, Notion, Cal.com, Hunter) · Git · local-first / privacy-first architecture · Claude & frontier-model APIs
- Human: consultative technical sales · team leadership & training · UX/brand design (A.A.S., Graphic Design)

EARLIER CAREER — RANGE & RELIABILITY

- Armed Security Officer, Charlotte, NC · 07/2025 – 04/2026 (concurrent with venture work)
- Chef (Kitchen Lead), Noble Smoke, Charlotte, NC · 2023 – 2024 — led kitchen team, high-volume operations
- Solar Sales Associate, Blue Raven Solar, Charlotte, NC · 2021 – 2022 — consultative technical sales, quota-beating
- Sales & Operations, Archer Paper Co, Charlotte, NC · 2019 – 2021
- Airborne Infantryman, U.S. Army, Fort Bragg, NC · 2013 – 2017 — OEF XIV deployment (Afghanistan); led 4 soldiers; accountable for \$2M+ in equipment; honorable discharge
- Design Associate / Regional Warehouse Manager, Abercrombie & Fitch DC, New Albany, OH · 2011 – 2013
- English Tutor (independent), Sagamihara, Japan · 2009 – 2011

EDUCATION

A.A.S., Advertising & Graphic Design — Central Piedmont Community College, Charlotte, NC · 2022 · GPA 3.8 · Phi Theta Kappa Honor Society