

Anthony James Padavano

SENIOR EDUCATION PLATFORM ENGINEER (AI-NATIVE)

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| LINKS | Portfolio · GitHub · agentic-titan · ORGANVM System | |
| PROFILE | Independent engineer and veteran educator (11 years, 2,000 students) building production-grade AI orchestration and educational infrastructure in TypeScript and Python. Creator of a 103-repository system governed by automated dependency validation and 2,349+ tests. Specialist in translating pedagogical intent into technical architecture, specifically through AI-augmented pipelines that bridge model capabilities with real-world reliability. Expert in "solo production at institutional scale" using frontier AI as a compositional instrument. Full-Stack Developer (Meta). 18 years professional experience. MFA Creative Writing, LGBTQ+. | |
| TECHNICAL SKILLS | TypeScript · Python · Claude Agent SDK · Node.js · CLI Tooling · GitHub Actions · CI/CD · Vitest · pytest · Zod · YAML/JSON Schema · React 18 · Express · pnpm Monorepos · Astro · Docker · Git · GCP / Terraform · WebSocket · Redis · D3.js · p5.js · Nginx | |
| SELECTED PROJECTS | Classroom RPG Aetheria — AI-Native Learning Environment A gamified education platform featuring AI-generated quests and knowledge crystals. Hardened for production with a 30-day technical sprint: implemented XSS mitigation (DOMPurify), robust AI failure handling with exponential backoff, and Sentry error monitoring. Achieved 100% pass rate across 45+ unit tests (Vitest). | |
| | ORGANVM Eight-Organ System — 103-Repository Learning Infrastructure A unified technical corpus of 21K code files and 3.6K tests. Governed by a formal promotion state machine and automated dependency validation (43 edges, 0 violations). Features 128 GitHub Actions workflows built on 18 reusable templates. A live demonstration of AI-native orchestration at scale. | |
| | agentic-titan — Multi-Agent Orchestration & Eval Framework TypeScript framework for orchestrating complex, multi-step engineering and pedagogical tasks across autonomous agents. Includes 18 development phases and 1,276 tests. Engineered for high-reliability tool invocation and task decomposition. | |
| | agent--claude-smith — Claude Agent SDK Reliability Layer Advanced agent implementation built on Claude Agent SDK. Features session persistence, self-correction hooks, and structured tool invocation designed to understand and mitigate model capability gaps in production environments. | |
| | Application Pipeline — CLI Pedagogical Orchestrator Python-based CLI suite for pipeline orchestration: 8-dimension scoring rubric, campaign management, and YAML-driven state machine. Translates complex research and synthesis requirements into production-ready materials. | |
| EXPERIENCE | Independent Software Engineer & Education Platform Architect | 2020 — Present |
| | <ul style="list-style-type: none">AI-Native Orchestration: Designed a 103-repository system governed by automated validation and 94 CI/CD pipelines — human directs pedagogical intent, AI generates volume, human reviews for correctness.Platform Infrastructure: Built CLI pipeline tools for scoring, drafting, and campaign orchestration using Python and YAML schema validation; optimized for enterprise-scale scannability.LLM Reliability: Developed multi-agent frameworks with the Claude Agent SDK (agentic-titan, 1,276 tests) featuring structured tool invocation and self-correction protocols.Systems Governance: Orchestrated 128 GitHub Actions workflows across 8 organizations, maintaining a validated dependency graph with zero back-edge violations. | |
| | Instructor — Composition, Writing & Complex Systems | 2015 — Present |
| | <i>Miami Dade College, Keiser University, Nova Southeastern, FAU, Young Harris, Tarrant County, Broward, Palm Beach State</i> <ul style="list-style-type: none">100+ courses across 8 institutions; 2,000+ students. Translating pedagogical requirements into accessible documentation and mentoring students in systemic technical rigor. | |
| | Digital Marketing Manager | 2023 — 2024 |
| | <i>Miami Dade College Foundation (nonprofit)</i> <ul style="list-style-type: none">Architected and led foundation website overhaul and campaign design, increasing donor engagement by 32% through data-driven technical execution. | |
| | Multimedia Specialist | 2011 — 2020 |
| | <i>AJP Media Arts — clients incl. Boca Ballet Theatre, Forward Funding, Arts in Boca</i> <ul style="list-style-type: none">Produced high-volume visual and narrative campaigns for educational and nonprofit organizations; 17.5M+ views, \$2M in fundraising through technical and creative production. | |
| | EDUCATION | |
| | M.F.A. Creative Writing , Florida Atlantic University | 2015 — 2018 |
| | B.A. English Literature , CUNY College of Staten Island | 2010 — 2014 |
| CERTIFICATIONS | Full-Stack Developer, Meta (2024) · UX Design, Google (2023) · Digital Marketing, Google (2023) · Project Management, Google (2023) | |