Anthony James Padavano

STAFF+ SOFTWARE ENGINEER (AGENT INFRASTRUCTURE & STATE)

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LINKS

Portfolio · GitHub · agentic-titan · ORGANVM System

PROFILE

Independent systems architect and software engineer building production-grade infrastructure for autonomous AI orchestration and resilient state management. Creator and sole architect of a 103-repository ecosystem across 8 GitHub organizations governed by automated validation, 94 CI/CD pipelines, and 2,349+ tests. Specialist in architecting secure, multi-tenant execution environments and durable execution patterns for long-running, multi-step agentic workflows. Expert in "solo production at institutional scale," utilizing an "AI-conductor" methodology to maintain technical integrity while building the scannable "Storefront" layers for connected agent intelligence. Full-Stack Developer (Meta). 18 years professional experience. LGBTQ+.

TECHNICAL SKILLS

Distributed Systems · Agentic State Management · Cloud Native (GCP/AWS) · Python · Go · Rust · Docker · Kubernetes · CLI Tooling · GitHub Actions · CI/CD · Zod · pytest · Vitest · Claude Agent SDK · YAML/JSON Schema · React 18 · pnpm Monorepos · GCP / Terraform · WebSocket · Redis · Nginx · D3.js · p5.js

SELECTED PROJECTS

agentic-titan — Multi-Agent Orchestration & State Framework
TypeScript framework for orchestrating complex, multi-step engineering tasks across autonomous agents. Includes 18 development phases and 1,276 tests. Engineered for high-reliability tool invocation, task decomposition, and durable state management across failure boundaries.

ORGANVM Eight-Organ System — 103-Repository Autonomous Infrastructure
A unified technical corpus encompassing 21K code files and 3.6K tests. Governed by a formal promotion state machine and automated dependency validation (43 edges). Features 128 GitHub Actions workflows built on 18 reusable templates. A live demonstration of how institutional-scale autonomous infrastructure can be managed by a solo practitioner.

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 ground AI agency in real-world infrastructure and stateful workflows.

Application Pipeline — Systems Analysis & Workflow Suite
Python-based CLI suite for pipeline orchestration: 8-dimension scoring rubric and YAML-driven state machine. Automates intake, research, and synthesis tasks, translating deep technical evidence into scannable storefront materials for agentic evaluation.

Portfolio — Performance-Grade Documentation Site
Astro 5 site governed by a CI/CD "quality ratchet" that enforces strict validation and testing standards. Represents the scannable "Storefront" for 42 published essays (~142K words) documenting the frontier of AI orchestration.

EXPERIENCE

Independent Software Engineer & Infrastructure Architect   2020 — Present
- **Agentic State Management:** Designed a 103-repository system governed by a formal promotion state machine and automated validation; treating state persistence and recovery as a core architectural primitive.
- **Infrastructure Reliability:** Built a corpus of 2,349+ tests across 94 active repositories, ensuring technical integrity in complex, multi-tenant developer tooling and agentic systems.
- **AI-Native Automation:** Developed multi-agent frameworks using the Claude Agent SDK featuring structured tool invocation and self-correction protocols for autonomous engineering.
- **Governance at Scale:** Orchestrated 128 GitHub Actions workflows built on 18 reusable templates to maintain production reliability and minimize state-friction across 8 independent organizations.

Instructor — Composition, Writing & Complex Systems   2015 — Present
Miami Dade College, Keiser University, Nova Southeastern, FAU, Young Harris, Tarrant County, Broward, Palm Beach State
- 100+ courses across 8 institutions; 2,000+ students. Translating complex technical and architectural concepts into accessible documentation and mentoring junior developers in technical rigor.

Digital Marketing Manager & Narrative Strategist   2023 — 2024
Miami Dade College Foundation (nonprofit)
- Architected foundation website overhaul and campaign design, utilizing data analysis to drive a 32% increase in donor engagement through technical execution.

Multimedia Specialist   2011 — 2020
AJP Media Arts — clients incl. Boca Ballet Theatre, Forward Funding, Arts in Boca
- Produced high-volume visual and narrative campaigns; generated 17.5M+ views 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)