Anthony James Padavano

STAFF SOFTWARE ENGINEER (COMPUTE CAPACITY & OBSERVABILITY)

New York City | 561-602-7300 | padavano.anthony@gmail.com

LINKS

Portfolio · GitHub · agentic-titan · ORGANVM System

PROFILE

Independent software engineer and systems architect building production-grade compute infrastructure, data pipelines, and Kubernetes-native observability tools. 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 "Accelerator Capacity" telemetry systems that translate complex fleet telemetry into scannable "Storefront" insights. Expert in Python, SQL (BigQuery), and managing heterogeneous cloud environments at institutional scale through an "AI-conductor" methodology. Full-Stack Developer (Meta). 18 years professional experience. MFA Creative Writing. LGBTQ+.

TECHNICAL SKILLS

Python · SQL (BigQuery) · Kubernetes · Prometheus · Grafana · CLI Tooling · GitHub Actions · CI/CD · TypeScript · Node.js · Docker · Git · Zod · pytest · Vitest · YAML/JSON Schema · React 18 · Express · pnpm Monorepos · GCP / Terraform · WebSocket · Redis · Nginx

SELECTED PROJECTS

ORGANVM Eight-Organ System — 103-Repository Compute Infrastructure
A unified technical corpus encompassing 21K code files and 3.6K tests. Governed by a formal promotion state machine and automated dependency validation. Features 128 GitHub Actions workflows built on 18 reusable templates. A live demonstration of Kubernetes-native orchestration and capacity management at institutional scale.

Application Pipeline — Data Engineering & Systems Analytics Suite
Python-based CLI suite for pipeline orchestration: 8-dimension scoring rubric, campaign management, and YAML-driven state machine. Automates intake, research, and synthesis tasks, translating deep technical telemetry into scannable storefront materials for compute planning.

agentic-titan — Multi-Agent Orchestration & CLI 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 and transparent task decomposition in high-intensity research environments.

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 complex engineering workflows.

Portfolio — Performance-Grade Monitoring Interface
Astro 5 site governed by a CI/CD "quality ratchet" that enforces strict validation and testing standards. Represents the scannable "Storefront" for deep systemic infrastructure work and real-time process documentation.

EXPERIENCE

Independent Software Engineer & Systems Architect
2020 — Present
- **Infrastructure Reliability:** Built a corpus of 2,349+ automated tests across 94 active repositories, ensuring technical integrity in complex, cross-organizational developer tooling and compute systems.
- **Compute Telemetry:** Designed CLI tools for automated research and data synthesis using Python and YAML schema validation; optimized for managing high-context density in distributed environments.
- **AI-Native Automation:** Developed multi-agent frameworks using the Claude Agent SDK featuring structured tool invocation and self-correction protocols for autonomous engineering.
- **Systems Governance:** Orchestrated 128 GitHub Actions workflows built on 18 reusable templates to maintain production reliability and capacity visibility 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 requirements 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 the intersection of technical production and storytelling.

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)