

Anthony James Padavano

SOFTWARE ENGINEER, SANDBOXING (LINUX OS & VIRTUALIZATION)

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LINKS	Portfolio · GitHub · agentic-titan · ORGANVM System	
PROFILE	Independent software engineer and systems architect building production-grade Linux infrastructure and secure orchestration layers. Creator and sole architect of a 103-repository ecosystem across 8 GitHub organizations governed by automated validation and 2,349+ tests. Specialist in low-level system programming, kernel optimization, and virtualization (KVM/QEMU) for high-intensity AI workloads. Expert in "solo production at institutional scale," utilizing an "AI-conductor" methodology to maintain technical integrity while optimizing virtualization performance for training and serving frontier models. Full-Stack Developer (Meta). 18 years professional experience. MFA Creative Writing. LGBTQ+.	
TECHNICAL SKILLS	Linux Kernel · System Programming · KVM/QEMU · C/C++ · Rust · Python · CLI Tooling · GitHub Actions · CI/CD · Zod · pytest · Vitest · YAML/JSON Schema · Node.js · Docker · Git · pnpm Monorepos · GCP / Terraform · WebSocket · Redis · Nginx · D3.js · p5.js	
SELECTED PROJECTS	ORGANVM Eight-Organ System — 103-Repository Systems 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 low-level infrastructure orchestration and kernel-parameter management at institutional scale.	
	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, task decomposition, and secure, isolated task execution in virtualized 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 systems engineering workflows.	
	Application Pipeline — Systems Analysis & Infrastructure 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 telemetry into scannable storefront materials.	
	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 monitoring.	
EXPERIENCE	Independent Software Engineer & Systems Architect 2020 — Present <ul style="list-style-type: none">Infrastructure Reliability: Built a corpus of 2,349+ tests across 94 active repositories, ensuring technical integrity in complex, cross-organizational developer tooling and kernel-level components.Systems Governance: Designed a 103-repository system governed by automated validation and 94 CI/CD pipelines to sustain institutional-scale production as a solo practitioner.AI-Native Automation: Developed multi-agent frameworks using the Claude Agent SDK featuring structured tool invocation and self-correction protocols for autonomous systems engineering.Golden Path Orchestration: Designed CLI pipeline tools using Python and YAML schema validation; optimized for managing high-volume data and complex state transitions.	
	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 complex technical and architectural requirements into accessible documentation and mentoring junior developers in technical rigor.	
	Digital Marketing Manager & Narrative Strategist 2023 — 2024 <i>Miami Dade College Foundation (nonprofit)</i> <ul style="list-style-type: none">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 <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; generated 17.5M+ views through technical and creative orchestration.	
	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)