Anthony James Padavano

SOFTWARE ENGINEER, DESKTOP (ELECTRON & AI INTERFACES)

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

LINKS

Portfolio · GitHub · agentic-titan · ORGANVM System

PROFILE

Independent software engineer and multimedia specialist building production-grade desktop and CLI infrastructure at institutional scale. 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 packaging frontier AI capabilities into elegant, scannable desktop experiences that augment human work through deep OS integration and high-performance Electron orchestration. Expert in "solo production at institutional scale," utilizing an "AI-conductor" methodology to maintain technical integrity while providing delightful, product-focused user interfaces. Full-Stack Developer (Meta). 18 years professional experience. MFA Creative Writing. LGBTQ+.

TECHNICAL SKILLS

Electron · TypeScript · React 18 · Node.js · Desktop App Development · Native macOS/Windows APIs · Rust · Swift · CLI Tooling · GitHub Actions · CI/CD · Zod · pytest · Vitest · YAML/JSON Schema · Docker · Git · pnpm Monorepos · GCP / Terraform · WebSocket · Redis · Nginx · D3.js · p5.js

SELECTED PROJECTS

Portfolio — Performance-Grade Desktop & Web Showcase
Astro 5 site governed by a CI/CD "quality ratchet" that enforces strict validation and testing standards. Features generative p5.js visual layers and D3.js data visualizations. Represents the scannable "Storefront" for deep systemic work and high-fidelity desktop UI engineering.

Classroom RPG Aetheria — AI-Native Learning Environment
Gamified education platform prototype featuring dynamic AI quest generation and interactive desktop-grade interfaces. Hardened for production with XSS mitigation and robust failure handling. An exploration of building resilient, human-centric native experiences for complex AI integrations.

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 visual state management across local environments.

Application Pipeline — Systems Analysis & Desktop Integration 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 desktop users.

ORGANVM Eight-Organ System — 103-Repository Developer 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. A live demonstration of how institutional-scale local state can be managed by a solo practitioner.

EXPERIENCE

Independent Software Engineer & Desktop Architect   2020 — Present
- **Infrastructure Reliability:** Built a corpus of 2,349+ tests across 94 active repositories, ensuring technical integrity in complex, cross-organizational developer tooling and local desktop environments.
- **Native System Integration:** Designed CLI and desktop-integrated pipeline tools using Python and YAML schema validation; optimized for managing high-volume data and local file state.
- **AI-Native Automation:** Developed multi-agent frameworks using the Claude Agent SDK featuring structured tool invocation and self-correction protocols for autonomous local engineering.
- **Governance at Scale:** Orchestrated 128 GitHub Actions workflows built on 18 reusable templates to maintain production reliability and minimize incident 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 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 and visual 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)