

Toshon Jennings

Forward Deployed Engineer

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I build AI and developer tooling end to end — product, backend, packaging, docs — and I'm the person non-technical staff come to when the system breaks. Last twelve months: **5,200+ commits across 31 repositories**, a live SaaS with payments and 101 database migrations, six published open specifications, two npm packages, and two Homebrew formulae.

SELECTED WORK

StudioOS — Founder & sole engineer

3,005 commits · v2.9.6 · Oct 2025–present

A live, multi-tenant creator workspace, built and shipped solo.

- React + TypeScript on Vercel over a Supabase/Postgres backend with **101 migrations**, Stripe billing and webhooks, and public creator profiles at `/u/<handle>`
- Deep editing surface: TipTap rich text, Monaco for code, in-browser Python via Pyodide, D3 visualizations, KaTeX, PDF export, offline-capable service worker
- Ships an **MCP server** so agents can operate the workspace as native tools
- Maintains a test and coverage-check suite alongside the feature work

Perci — open-source AI workspace

268 commits · 22 releases · v0.45.9

- Electron/React desktop app unifying OpenAI, Anthropic, Gemini, Groq, and DeepSeek with local inference (Ollama, LM Studio, vLLM) behind one interface
- **Mission Control** orchestrates parallel coding agents — Claude Code, Aider, Codex, Cursor CLI, Copilot — each isolated in its own workspace, with run-state visualization
- Autonomous deep-research mode that plans searches, evaluates sources, and produces cited reports; ships signed macOS builds

Cassandra — real-time intelligence platform

234 commits

- Aggregates **20 live data domains** — aviation, AIS maritime, 2,000+ traffic cameras, USGS seismic, NASA FIRMS, GDELT, NVD CVE, OFAC sanctions, OONI, IODA — into a single WebGL map holding 60fps with thousands of concurrent entities
- The same surface is exposed over MCP, so an agent gets live global state in one call
- Documented upstream data-licensing constraints rather than quietly ignoring them

Agent Rules Suite — six published open specifications

2026

- [HANDOFF.md](#) (session continuity across agent runs), [PORTMASTER.md](#) (port collisions), [HITL.md](#) (append-only ledger of human rulings), [SUMMARY.md](#) (repo maps that cut token spend), [REPO.md](#) (settled architectural constraints), [taste](#) (learned preferences)
- Each targets a specific observed failure in human–agent collaboration, written in plain Markdown so both sides can read the same file

PHLCRSH-V2 — Philadelphia street-safety analysis

70 commits

- Joins nine public datasets — PennDOT, DVRPC, Census ACS, TIGER, land cover, DEM, 311 — into a browser-local analytical map; DuckDB-WASM reads GeoParquet client-side, no backend
- States plainly in its own README that the map is not a causal model; ported to Trenton

Also shipped: [Lighthouse](#) — port-awareness CLI and desktop app from one shared engine, published to npm · [Mercury](#) — Hermes Agent desktop client, 250 commits · [CAps](#) — GPG-signed cross-platform utility, 193 commits, published key fingerprint · cleanmac and github-overview — Homebrew tap

EXPERIENCE

The City School — Philadelphia, PA

Sep 2022–present

IT Coordinator (Aug 2023–present) · Teacher (Jan–Jul 2023) · Teacher Aide (Sep–Dec 2022)

- Sole in-house IT** for a Philadelphia school — the person non-technical staff came to, and the person who built the tool when the workflow itself was the problem.
- Support **~290 users** — 65 staff and faculty on Windows laptops, 225 students on Chromebooks — with ~75 devices under direct management and the student Chromebook fleet administered through Google Admin
 - Held the same function across **3 campuses serving 400+ students** before enrollment decline and staff consolidation reduced the footprint
 - Built the tooling I run the function on: an IT admin dashboard, a separate Chromebook inventory service in Go, and an agent that turns raw work notes into monthly and annual reports
 - Introduced a ticketing system (Raiseaticket) and asset management (AssetTiger) where the school had neither, plus a written knowledge base staff could self-serve from; **cut incident resolution time 20%**
 - First-line monitoring of on-site infrastructure via Google Admin and Darktrace, escalating to the school's MSSP — the working interface between vendor and end users
 - Repaired **48 Chromebooks** in year one, equipping roughly 2.5 additional classrooms instead of buying replacements
 - Authored two proposals for school leadership: **TCS-Net**, an AI knowledge base answering staff questions over the school's own documents with citations and cost controls; and **FutureReady@TCS**, a market-driven career-prep curriculum — each with a plain-language explainer built for budget owners and staff. Designed and pitched.

Cert-Ready Technology Academy, LLC — Founder & Managing Director

Jun 2025–present

- Launched certification-first pathways letting middle school, high school, and adult learners earn industry credentials alongside diplomas
- Developed curricula aligned to CompTIA and Microsoft standards; built and shipped the organization's site

Say Yes to Education — Program Assistant, Philadelphia, PA

Nov 2011–Jun 2018

- Nearly seven years translating institutional systems for students navigating them for the first time; coordinated academic interventions with high school and university staff within FERPA constraints

Sankofa Freedom Academy Charter School — Instructor, Philadelphia, PA

Oct 2015–Jun 2017

- Taught Honors Algebra I/II and Pre-Algebra; co-taught middle school math, improving standardized test performance
- Ran the middle and high school chess program and SAT prep

EDUCATION & CREDENTIALS

WGU	BS/MS, IT Management (in progress)
NexGenT	Cyber Security Specialist (NISP) — 480-hour program
Thinkful	UI/UX Design

CompTIA Security+ (2022) · CompTIA A+ (2023) · ITIL 4 Foundation (2024) · GoGuardian Certified Coach (2024)

TECHNICAL

Languages	TypeScript, JavaScript, Python, Go, SQL, Bash, PowerShell
Frontend	React, Next.js, Electron, Vite, Tailwind, MapLibre GL, D3
Backend	Supabase/Postgres, DuckDB, Vercel serverless, Stripe, GeoParquet
AI	Anthropic, OpenAI, Gemini, Groq, DeepSeek; local inference via Ollama, LM Studio, vLLM, llama.cpp; MCP servers; multi-agent orchestration
Practice	GPG-signed releases, npm and Homebrew publishing, CI, technical writing