Renan Melo

Product-first engineer • End-to-end systems (tooling UX, backend, desktop distribution) • Web3 auth/licensing • Security & operations

✉ byrenanmelo@gmail.com · 🔗 renan-melo-connexions · ⭘ SNE-Labs · 🌐 renan.snelabs.space

Location: São Paulo, Brazil   (*remote-friendly*)

LIVE DEMOS · snelabs.space · radar.snelabs.space · (case studies + Evidence Room on portfolio)

Summary

Self-taught, product-first engineer with an operator mindset. I build and run production systems end-to-end: platform UX (persistent shell, modular navigation), backend and integrations, desktop distribution with local runtime, and wallet-based auth/licensing (signature/SIWE) with session/device control. High signal by default: fewer claims, more proof (artifacts, diagrams, PDFs, and code in the Evidence Room).

Highlights

- **OS-like web platform**: unified modules under one domain with consistent navigation and a single product context (*control plane*).
- **Operable product surfaces**: persistent *trust surfaces* (Docs/Status/Pricing) to support onboarding, transparency, and operations.
- **Desktop + Web handoff**: local runtime + web onboarding with Browser → Desktop deep-linking and session/device control.
- **Web3 auth/licensing**: wallet connect + SIWE signature + tier/entitlement gating (Free/Pro/Enterprise).
- **Applied security**: explicit guarantees (domain separation, verifiable signals, compromise response, compact threat model).

Experience & Projects

SNE Radar — Desktop + Web + Backend — Independent project (production) — tooling-grade market reader 2025 — Present

radar.snelabs.space · portfolio case study

| Local desktop runtime | Web onboarding | SIWE / signature auth | Device sessions | Diagnostics / recovery |

- Built a desktop app with local runtime and tooling UX, packaged for distribution.
- Web onboarding with signature-based auth (SIWE) and **Browser → Desktop handoff** (deep link).
- Device/session control and revocation; diagnostics and recovery layer (crash history + diagnostics bundle).
- Data integrations and an operational layer to support stability, observability, and iterative releases.

SNE Labs — SNE OS (Web Control Plane) — Independent project (production) — OS-like console / platform UX 2025 — Present

snelabs.space · /home · /radar · /pass · /vault

| Platform UX | Modular routing | Trust surfaces | Wallet gating |

- Unified multiple modules into an "OS-like" experience with consistent navigation and a persistent layout (single context).
- Built global trust/ops surfaces (Docs/Status/Pricing) to reduce onboarding friction and improve operational clarity.
- Wallet connect + signature flows with tiered access states (Free/Pro/Enterprise).
- Continuous delivery: integration, troubleshooting, validation, and deploy.

SNE Vault Protocol — Security architecture — spec, threat model, verifiable guarantees 2025 — Present
snelabs.space/vault · portfolio case study

| Dual-kernel | Proof-of-Uptime | AEAD / HKDF | Tamper + zeroization | Governance-ready |

- Modeled "trust by technical proof": domain separation, verifiable signals, and compromise response.
- Defined cryptographic controls (AEAD, HKDF) and tamper detection + zeroization policies.
- Compact threat model and explicit guarantees (domain separation, verifiable signals, compromise response).
- Published artifacts (PDFs/diagrams/evidence) in the Evidence Room.

Featured Project — SNE Radar

10-SECOND SUMMARY
Distributed market-reading system with a **local desktop runtime**, **web onboarding**, and an operational layer for **diagnostics/recovery**, using SIWE signature auth and device/session control.

LINKS
🌐 radar.snelabs.space · 🌐 renan.snelabs.space · 🞇 github.com/SNE-Labs

TECH
PYTHON · FLASK · WEBSOCKETS/SOCKETIO · VUE · DESKTOP PACKAGING · SIWE / WALLET SIGNATURE

Skills

Product & UX	Platform UX (persistent shell, modular routing, states/tiers), tooling UI, trust surfaces (Docs/Status/Pricing).
Web Platform	React/TypeScript, SPA routing, module integration, design systems, API-driven UI and state.
Backend & Integrations	APIs, auth/sessions, data integrations, WebSockets, debugging and production hardening.
Desktop Distribution	Local runtime, packaging/distribution, Browser → Desktop deep links, diagnostics and recovery.
Web3 (Product)	Wallet connect, SIWE signatures, tier/entitlement gating, on-chain source of truth when applicable.
Applied Security	Threat modeling, domain separation, verifiable signals, AEAD/HKDF, compromise response.

Selected stack: React/TS, Vue, Python, Flask, WebSockets/SocketIO, Solidity/Scroll L2 (when applicable), Cython (optimization), deploy/ops.

Education

Self-taught — project-driven learning, production delivery, documentation, and rapid iteration.

Interests: platform/devtools UX, reliability/observability as product, applied security, and distributed systems with strong UX.