ENGINEERING PROFILE / 8 OCTOBER 2026

Louijie Compo

Systems & AI Engineer

Engineering dependable systems where software, hardware, and applied AI meet.

Over 14 years across physical devices, software platforms and applied intelligence. My work connects architecture with implementation, testing and technical communication.

Embedded & product engineering

Electronics, embedded software, timing and device interfaces. Make the behavior at each boundary visible and testable.

Architecture & technical leadership

Make interfaces and trade-offs explicit, carry decisions into working code, and help others reason about the system through technical communication and mentorship.

Applied AI & simulation

Connect software tools with observations they can interpret. Use simulation and retained evidence to test assumptions and understand failure.

Start a conversation

Professional opportunities and technical collaboration

LinkedIn: louijie-compo
louijiecompo.com/about/ · Contact pathways

Approved professional background. Public project examples are on page 2. This profile does not list employers, role dates or confidential engagements.

SELECTED PUBLIC WORK / 02

Inspect the engineering.

These public projects illustrate engineering methods. They are separate from my professional career history.

AeroLoop

A simulation-only drone laboratory for diagnosing flight and landing behavior. Compare recorded experiments, inspect controller trade-offs and follow every failed acceptance gate.

Simulation-only MVP with simplified actuators; versioned release pending. No physical flight, PX4 execution or hardware validation.

louijiecompo.com/work/aeroloop/

Omniweft

An early world engine with explicit permissions, recoverable changes and inspectable assets. Explain why content is retained and what ordinary collection would remove.

Incubating. The room capture has separate Windows GPU evidence. Asset inspection is CPU-only and adds no World authority or durable asset store. Native persistence does not make the worker host crash-durable.

louijiecompo.com/work/omniweft/

Cogniform

A 3D engine that lets software and AI tools change a scene, then inspect images and object data from the same scene version.

Early, unreleased engine. The linked capture is a small local cube example, not a general AI benchmark.

louijiecompo.com/work/cogniform/

Embedded systems and reproducible software

Yocto + QEMU EDU Lab · MakopaOS
LudoWeave Engine

Case studies separate implemented behavior, retained captures, source-derived diagrams and remaining limits. Project results do not imply commercial deployments or physical hardware validation.

Technical writing · All public projects · GitHub: xsparc

Source: approved content in louijiecompo.com, reviewed 8 October 2026. Follow the case-study links for pinned evidence and later updates.