

Luiz Thiago de Souza

Senior engineer: AI agents and harnesses, games, web

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SUMMARY

I build systems with and for AI agents: harnesses that keep an agent inside its scope, gates that make it prove its work, and pipelines that route each stage to the right model while a human keeps the final say. That work stands on more than twelve years of shipping software: Unity games on Steam, VR training used in schools, HTML5 games, and full-stack web products with real payments.

EXPERIENCE

Senior Engineer: Games, Web and AI Tooling, Under NDA

08/2024 – Now · Remote

- Leads Unity client development on a multiplayer online game backed by Go servers on an ECS engine: gameplay, UI, networking and API integration.
- Builds HTML5 casual games in TypeScript and PixiJS for a live audience.
- Designs and runs AI agent harnesses for day-to-day engineering: per-stage model routing, verification gates, multi-repo change rounds and an autonomous backlog pipeline with human approval gates.
- Mentors developers, reviews code and enforces clean architecture across teams.

Senior Unity 3D Developer, Bkom Studios

03/2021 – 06/2024 · Canada

- Developed core gameplay features and integrated UIs across multiple projects.
- Built custom Unity internal tools that removed workflow bottlenecks for the team.
- Shipped two PC titles on Steam and one mobile game.
- Worked daily with design, art and QA.

Lead Unity 3D Developer, Infinity Games

05/2020 – 03/2021 · Portugal

- Created hyper-casual games from prototype to publishing.
- Led and mentored a young team of developers and artists.
- Built workflows that shortened delivery to clients.

Senior Unity 3D Developer, Javary Games

03/2019 – 05/2020 · Brazil

- Created hyper-casual games from prototype to publishing.
- Integrated assets, sound, visual effects and animation.

Lead Unity 3D Developer, Beenoculus VR

01/2016 – 03/2019 · Brazil

- Led VR and AR solutions, including large training simulations and educational platforms.
- Technical lead of BeeTools VR English School, deployed in more than 30 schools across Brazil.
- Integrated and optimized VR and AR hardware SDKs in Unity.
- Project recognized at South Summit Madrid and South Summit Mexico; finalist at the Global EdTech Startup Awards.

Unity 3D Developer, Blackmuppet Games

01/2014 – 01/2016 · Brazil

- Created games for digital marketing campaigns.
- Built internal tools such as custom Unity inspectors.

SELECTED WORK

- **Loop (agent loop monitor).** A live dashboard for an agent's guard rails, fed by shell hooks that will not let a turn end while the build is red.
- **Bugflow (ticket-to-fix pipeline).** One click turns a ticket into a gated, spec-driven agent run that proves the fix red-then-green and stops for a human before anything ships.
- **Fleet (multi-repo rollouts).** A control tower for applying one change to many repositories: stage read from git, traps caught before work starts, lessons carried from repo to repo.
- **Autonomous harness (autonomous backlog agent).** An unattended agent pipeline that works a real backlog inside a budget and publishes nothing without a human click.
- **Madzik: Episode 1.** A combat-driven PC game on Steam: core gameplay, combat, enemy AI and UI flows, from prototype to polish.
- **Pathfinder: Gallowspire Survivors.** A survivors-like on Steam: the talent tree behind its progression and the companion system for allied units.
- **Pipe Mania.** The classic pipe puzzle rebuilt for the browser, with a tested, framework-agnostic game core and a PixiJS renderer.
- **SemFila (qr ordering for food stalls).** QR-code ordering and Pix payments for Brazilian food stalls, with a live order panel and thermal ticket printing.
- **Stickaboo (personalized sticker shop).** A bilingual Québec shop that turns a child's name into printable sticker sheets and sells them through Stripe Checkout.

SKILLS

- **AI engineering:** Agent harnesses, Claude Code, Multi-model pipelines, MCP servers, Vercel AI SDK
- **Game development:** Unity, C#, Gameplay programming, UI systems, Multiplayer, Editor tools, VR / AR, PixiJS, Three.js
- **Web and apps:** TypeScript, React / Next.js, Node.js, .NET / C#, Go, React Native / Flutter
- **Data and delivery:** PostgreSQL, MySQL, Payments, Git, Clean architecture

EDUCATION

- Postgraduate degree, Full-Stack Web Development, Anhanguera University, 2025
- Apple Developer Academy (iOS), Pontifical Catholic University of Paraná, 2015
- Degree, Digital Game Programming, Pontifical Catholic University of Paraná, 2014

LANGUAGES

English (Professional), Portuguese (Native)