Luma Wanderley de Oliveira

Email: luma.lwo@gmail.com, **Phone:** +49 176 41071265, **Portfolio:** ***lumawo.com***

SUMMARY

Creative developer specializing in interactive media, with over 10 years of experience building playful software: indie games, interactive installations, and digital art, grounded in applied research in computing. Highlights include contributing to the social and cultural exhibition design project for the Casa de Cora Coralina Museum in Goiás, Brazil (2016), the serious game *O Caso de Ana* (2020), a health data ethics game played by 7,000+ people delivered through a digital health program's virtual learning environment, and the interactive artwork *A-fetus*, created in 2016 and presented at ARS Electronica Festival 2026. Currently developing *Meu Amigo Caramelo*, a game about inclusion and diversity, finalist at SBGames 2026.

SKILLS & ABILITIES

- **Programming:** Advanced C# programming and game development with Unity (main focus); experience with Python and Lua; application of design patterns and best practices for organized, scalable code; mapping abstract concepts into software architecture; rapid prototyping of games and interactive experiences.
- **Digital Art and Interactive Media:** Processing and Matlab for image manipulation and generative interactions; Adobe Creative Suite (Illustrator, Photoshop, InDesign, Premiere, After Effects).
- **Hardware and Electronics:** Prototyping basic electronics projects with Arduino; knowledge of microcontrollers and programming with Raspberry Pi and ESP.
- **Tools and Team Workflow:** Agile methodologies: experience with Scrum; development management with Jira; documentation and low-level diagramming/prototyping with Notion, Miro, and Figma; team communication with Slack, Microsoft Teams and Discord; version control with Git; collaboration with artists, designers, audio engineers, and other professionals.
- **Generative AI:** Use of AI tools to program faster and more efficiently; prompt creation and critical analysis of AI responses.
- **Soft Skills:** Fast learner with genuine enthusiasm for new technologies; creative problem-solving applied to playful and interactive experiences; proactive mindset, driving problems through to complete solutions.

RELEVANT EXPERIENCE

Media Lab / Iberoamérica (Brazil)
2014 – current

Media Lab / Iberoamérica — Collaborator (project basis, 2016–present) Collaborating with Media Lab / Iberoamérica, an international R&D network of 13 laboratories focused on art, technology, and interactive media, where I co-created interactive installations and playful-technology projects. Highlights include *Sismograma* (2026), a co-created installation driven by computer vision, in which visitors' movements are read as seismic oscillations generating sismograms, sound, and visuals in real time; *A-fetus* (2016), a proximity-responsive installation on presence and care with heartbeat-reactive sound, presented at ARS Electronica Festival 2026; and *Chronotótipos*, a co-created installation of seven proximity-sensing clocks that mark each visitor's own time, exhibited at the 15th Sesc Winter Festival in Petrópolis. As part of the Media Lab team, I also contributed to the projection-based poetic media interventions for the Casa de Cora Coralina Museum's redesign (2015–16) — the only project approved in the Central-West region under Caixa Econômica Federal's 2015–2016 grant — and co-developed *Cubos C3*, a tangible mini-gaming platform of three Arduino-equipped cubes (gyroscope, LED strips, radio) that generate light, sound, and vibration from physical interaction.

Independent Game Developer
2020 – current

Games Co-Producer, Game Designer & Lead Programmer of *Meu Amigo Caramelo* (Unity, 2024–present), a virtual pet game about inclusion and diversity: implemented core systems including PlayFab backend, pet needs and behavior, quests, minigames, and HUD; led a multidisciplinary team with agile scope and risk management and oversaw the port to mobile — showcased at Brasília Game Fest and Gamescom Brasil 2025, SBGames 2026 finalist. Previously solo-developed *O Caso de Ana* (RPG Maker, 2020), a serious game on health data security and ethics for a digital health education program, played by 7,000+ users, guiding players through realistic scenarios of using ConecteSUS, the Brazilian Ministry of Health's digital health records platform. Designed and developed *Jardim Circular* (2023) solo for a client — a cozy puzzle tycoon advergame featuring waste collection, drag-and-drop, store systems, UX/UI, and dialogues. Experimental work includes *Albris* (Unity, 2022), an MMORPG prototype with combat, quests, inventory, level design, and Photon multiplayer sync, and *A Lenda de Hayhu* (Unreal Engine, 2021), an FPS with skills, enemy AI, and cinematics built for self-directed exploration of the engine. Also designed and programmed complete prototypes under 48-hour constraints at Game Jam Plus 2023 and InnoGames Jam 2023 and 2024.

EDUCATION

- **Ph.D. in Computer Science** – **Federal University of Goiás** – **Brazil (completed 2023)**
  Title: Salus Ciber Ludens: a digital game-based approach for chronic disease self-care.
- **M.Sc. in Computer Science** – **Federal University of Goiás** – **Brazil (completed 2018)**
  Title: Framework L for mHealth Developers in the Context of Self-Care and Gamification.
- **Specialization in Innovation in Interactive Media** – **Federal University of Goiás** – **Brazil (completed 2018)**
- **B.Sc. in Computer Science** – **Federal University of Goiás** – **Brazil (completed 2015)**
  Title: Game for assessing facial emotion recognition in patients with mental disorders.
- **Visual Effects** – **Pixels School of Design and Technology** – **Brazil (completed 2018)**
- **Engagement Techniques for Games, Audiovisual, and Design** – **Brazilian School of Games** – **Udemy (completed 2021)**
- **Programming Design Patterns for Unity: Write Better Code** – **GameDev.tv** – **Udemy (completed 2023)**

OTHER ACCOMPLISHMENTS

- Volunteer technical contributor to an oral cancer education program, designing and typesetting educational ebooks; volunteer consultant on other social-impact projects.
- Speaker on games and motivation, participating in events like Campus Party.
- 1st place - VI Kelps Spoken Poetry Contest - youth category, Kelps Publisher and Leart Bookstore and Distributor.
- One of the leaders of the “We Make Digital Games” project, which encourages computer science undergraduate students to enter the field of digital game development.
- OUTSTANDING STUDENT IN POSTGRADUATE STUDIES AT INF/UFG, INF in 2019.
- 3rd place among the Full Papers in the Health Track for the work 'Development of a game for hypertension using the Design Science Research methodology: balancing Science and Art,' XX Brazilian Symposium on Computer Games and Digital Entertainment (SBGames 2021).

LANGUAGES

Portuguese – fluent native • English – intermediate • German – elementary