



Thaís Alvarenga (b. 2001, Honduras) is an interactive media engineer, human–computer interaction designer/researcher, and educator. Her work focuses on Human-Computer Interaction and Human-AI Encounters (HAIE) for cultural expression, engagement, and technological literacy. She designs interactive environments, XR experiences, and hybrid games that integrate AI and emerging media to advance human-centered computing in public and educational contexts. By collaborating with historically underrepresented communities, her practice explores how technology can serve as a medium for memory, collective storytelling, and empowerment.

EDUCATION

- Georgia Institute of Technology, M.S. Digital Media** 2024 - 2026 (Expected)
Specialization in human-centered computing, XR prototyping, and hybrid digital–physical design methods through participatory user design research.
- New York University, Abu Dhabi** 2019 - 2023
B.A. in Interactive Media, a multidisciplinary program combining art, computer science, and engineering to explore human-centered computing for creative expression.
Minors: Applied Mathematics; Film and New Media

EXPERIENCE

- Graduate Research Assistant, [LearnOM](#) at Georgia Tech** | Atlanta, USA *Present*
- Designed intuitive 3D visualizations and prototypes in VR (Apple Vision Pro) to simplify complex scientific concepts.
 - Translated abstract ideas into user-friendly interfaces through iterative design and usability testing.
 - Collaborated in an agile research team to develop for website accessibility and accuracy of interactions on 3D visualizations.
- Intern, [Public Arts Futures Lab](#), Fulton County Department of Arts & Culture** | Atlanta, USA *May -August 2025*
- Co-develop a scalable, modular, and open-source arts & technology curriculum for public libraries and community centers, covering VR (Meta Quest), AR, and creative coding tools to democratize access to emerging tech.
 - Lead research on free and low-cost XR software (e.g., Gravity Sketch, CoSpaces, Open Brush) to ensure accessibility by integrating findings into the curriculum for users with no prior technical background.
 - Facilitated workshops on how to navigate immersive environments, create 3D art, and experiment with interactive media, fostering digital literacy through artistic exploration.
 - Conducted field testing of on-site VR workshops at community hubs; collect and synthesize user feedback through surveys and post-session interviews to improve usability and relevance.
 - Developed clear, replicable instructional materials (including written guides and video walkthroughs) that allow librarians and educators to independently facilitate immersive media experiences.
 - Co-authored a data-backed impact report analyzing engagement across age groups and neighborhoods, used to inform policy recommendations for future arts-tech investments in Fulton County.
 - Collaborated with county stakeholders to promote art technology events and develop inclusive communications (flyers, email blasts, and social media content) aligned with public arts programming
- Technical Lead, Soundclouds, Georgia Tech** | Atlanta, USA *Jan 2025 - Present*

- Lead the development of *Soundclouds*, a large-scale AI-based interactive installation integrating helium-filled inflatables in a warehouse space to create a generative soundscape through tactile interaction
- Develop and implement computer vision systems (OpenCV, Python, TouchDesigner) to track inflatable positions for real-time music generation.
- Design and deploy a wireless network to support large-scale ambient intelligence
- Oversee physical computing for balloon interaction sensors (Arduino IDE).
- Manage technical infrastructure, equipment, computing systems, and logistics for an open-air indoor space.
- Project management of the computer vision, physical computing, and technical development teams.
- Oversaw public-facing media materials, including catalog design, marketing posters, and installation documentation, adhering to exhibition standards.

Teaching Assistant, LMC 4813 Arduino Prototyping, Georgia Tech | Atlanta, USA

Jan-May 2025

- Design and teach lab sections and workshops on Arduino prototyping, circuit design, and physical computing for sustainability-focused projects.
- Curate and manage learning resources, including maintaining the class blog (WordPress)
- Document student projects and develop instructional materials for high school students to replicate designs.
- Facilitate collaboration between students and local partners (Herman J. Russell West End Academy) to address environmental challenges through prototyping.
- Provide technical guidance and support for student projects
- Created graphic design materials, including event posters, booklets, and instructables to enhance visual communication of student projects and course methodologies
- Drafted reports and modular teaching content to support ongoing educational outreach and academic grant deliverables

Graduate Research Assistant, Digital World & Image Group, Georgia Tech | Atlanta, USA

Present

- Conduct research on the integration of emerging technologies for interactive digital playgrounds that foster participatory, co-created narratives within Latin American family contexts.
- Investigate design methodologies for creating embodied hybrid (physical/digital) games that blend cultural practices, sensory engagement, and intergenerational dialogue.

Graduate Assistant, Multimedia Recording Studios, Georgia Tech Library | Atlanta, US

Oct. - Dec. 2024

- Provided technical support and media production guidance to students and faculty using studio facilities for educational, research, and creative projects.
- Maintained and prepared professional recording equipment, fostering a reliable, accessible media environment.

Member, Augmented Environments Lab, Georgia Tech | Atlanta, USA

Oct. - Dec. 2024

- Worked with Dr. [David Bolter](#) advising XR projects for undergrad students, focusing on WebXR (AFrame, Three.js and P5.js) and sensory narrative applications in AR/VR.

Full-Time Intern, Organization of American States (OAS) | Tegucigalpa, Honduras

January 2024 - April 2024

- Led workshops on GenAI and automation to advance AI policy and foster digital transformation within international organizations.
- Redacted guidelines and training documents for accessible digital media design.

- Designed infographics and digital media for civil society and government institutions, for civil society and government institutions, including the Honduran Ministry of Foreign Affairs, focusing on accessible and culturally relevant communication while adhering to institutional styles.
- Developed data visualization tools to support decision-making in policy analysis and digital transformation.
- Wrote reports on media monitoring (web-scraped data) and institutional/government policy.
- Supported multi-stakeholder meetings (government, United Nations, 911 Emergency Number, etc.), documenting key insights and contributing to strategic initiatives in collaboration with government and international bodies.
- Researched and analyzed existing and proposed national policies, laws, and guidelines on human rights protection, democracy, and the rule of law in Honduras.
- Managed social media accounts, drafted newsletters and public announcements, and designed infographics aligned with accessibility and multilingual government communications.
- Represented the OAS Office at official meetings with the Honduran Government and the United Nations, documenting events with photographs and drafting reports and key point summaries.

Post-Graduation Practical Training Program Fellow, NYUAD | Abu Dhabi, UAE *May 2023 – July 2023*

- Conducted web scraping, data refinement, and database administration for numerous spreadsheet repositories comprising more than 1500 individual entries each.
- Conceptualized engaging social media content and researched newsletter designs.
- Collaborated on poster layout designs with the Hillary Ballou Center for Teaching and Learning.
- Coordinated Summer Reads book distribution for faculty and staff.
- Edited and compiled content for [Core Curriculum Student and Faculty Guides](#) and implemented Google Forms for program feedback.

Interactive Media Research Assistant, NYUAD | Abu Dhabi, UAE *August 2021 – May 2023*

- [Mandala](#) installation project: Assembled, debugged, and soldered circuitry for 22 motor boards with 15/16 stepper motors while managing computer vision code with Cinder and OpenCV.
- Designed and generated 2D and 3D renderings for project and grant proposals.
- Programmed VFX and shaders for motion capture performances.

Graphic Designer for Interactive Media Lab, NYUAD | Abu Dhabi, UAE *December 2022 – May 2023*

- Conceptualized and designed promotional materials (flyers, posters, stickers) for lab events, inspired by virtual 3D environments.
- Assisted in lab operations, managing equipment, and debugging projects in C++, Unity, and Arduino.
- Documented IM Showcase events through [videography](#) during the Fall and Spring semesters.

Scenographer and Sound Engineer, NYUAD | Abu Dhabi, UAE *September 2021 – December 2021*

- Scenographer and sound engineer for film student capstone projects.

LEADERSHIP ACTIVITIES

Arts and Humanities Academic Representative, NYUAD | Abu Dhabi, UAE

June 2022 – June 2023

- Elected as Academic Representative for the Arts and Humanities (A&H) Division and chaired the A&H Committee, the largest student-led academic committee at NYUAD
- Student representative for A&H and Core Curriculum faculty committees, reviewing course syllabi and minor proposals.
- Participated in faculty and provost meetings.
- Administered the budget and marketing for program and divisional events.
- Liaised between students and academic programs, serving as Student Representative on the Undergraduate Curriculum Committee and Integrity Violation Hearings.

Interactive Media (IM) Academic Representative, NYUAD | Abu Dhabi, UAE

September 2021 – May 2022

- Mentored students with structuring their four-year academic plan
- Communicated with the Registrar's Office regarding student concerns on course registration
- Advertised program events and served as a panelist during five academic advising events.

PUBLICATIONS & EVENTS

2025	Designing Virtual Reality Games for Grief: A Workshop Approach with Mental Health Professionals, <i>Proceedings of the IEEE 13th International Conference on Serious Games and Applications for Health (SeGAH 2025)</i> . 2025.
2024	Solace : Integrating Western and Emirati Poetic Traditions to Reimagine Narrative Poetry in VR, <i>Proceedings of the 13th EAI International Conference ArtsIT, Interactivity, and Game Creation</i> . 2024. Proceedings will be published in late November 2024. Road to Acceptance : A Gamified VR Narrative Journey Through the Stages of Grief. <i>Abstract Proceedings of DiGRA 2024 Conference: Playgrounds</i> . 2024. Link: https://dl.digra.org/index.php/dl/article/view/2388
2023	Introduction to Creative Coding Workshop, <i>Women in STEM Highschool Conference</i> , NYUAD, UAE Guest Lecturer: <i>Research Methods In Spatial Design for Narrative Applications in Virtual Reality, Designing Virtual Worlds</i> , NYUAD, UAE
2022	Student Perspective on Community Engagement as a Learning Tool, <i>Core Curriculum: Spring Courses in Development Orientation</i> , NYUAD, UAE Transitioning to STEM Curricula as an International Student, <i>Faculty Training Training: WeekZero</i> , Abu Dhabi, UAE You Reap What You So: An Algorave Performance , <i>Interactive Media Showcase</i> , Black Box Theatre, NYUAD Arts, Center, Abu Dhabi, UAE
2019	Memory, A Pen and A Blank Page My Honduras And The Role of Memoir And Writing In The Recovery From Trauma, <i>War Conference Panel II: Narrating Trauma</i> , NYUAD Arts Center, Abu Dhabi, UAE

AWARDS

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| • Educational Scholarship , Hondufuturo, Honduras | 2024 |
| • DiGRA Travel Bursar , Universidad de Guadalajara, Mexico | 2024 |
| • Reality Hack Travel Scholarship , Massachusetts Institute of Technology (MIT) | 2023 |
| • NYUAD Summer Film Grant , New York University Abu Dhabi | 2022 |

- *Grant for the production and screening of Providencia, an animated short about a river spirit from the indigenous Lenca community as she battles the consequences of dam construction in Honduras.*
- **Distinguished Delegation Award**, Council of Arab Social Affairs Ministers, 2021
The National University Model Arab League, Washington D.C.
- **NYU Global Game Jam**, New York University 2021
 - *Nominated for Best Art Design & Best Game Design for Mad Socks, a two-player game*
- **NYUAD Full Ride Scholarship**, New York University Abu Dhabi 2019

SKILLS

Computer Programming & Scripting: C++ (OpenCV, Cinder), C#, JavaScript (p5.js, ml5, jQuery, TensorFlow), Python, Arduino IDE, Java, Processing, MATLAB, SQL

XR Development & Interaction Design

- VR/AR Development (Oculus Quest, WebXR, Unity, Godot, A-frame, Three.js)
- UI/UX Research & Design (User Observations, Task Analysis, Affinity Diagram, Heuristic Evaluation)
- Iterative Prototyping & Usability Testing
- Narrative & Game Design for Digital and Physical Play

AI & Machine Learning

- Machine Learning Frameworks: TensorFlow, ml5.js, Teachable Machine
- Computer Vision: OpenCV (C++, Python)
- Generative & Creative AI: OpenAI, Stable Diffusion, Google Notebook LM, Perplexity

Digital Fabrication & Physical Computing

- Circuit Design & Prototyping (Arduino, Teensy)
- Sensor Integration for Interactive and Ambient Intelligence Systems

Design & Creative Tools

- Web Design & Development: WordPress, Cargo, HTML, CSS, Figma
- Game Design & Interactive Media: Unity, Godot, Java, Processing (Java, Python), Twine
- 3D Modeling & Animation: Blender, Shapr3D, Cinema 4D
- Shaders & Visual Effects: GLSL, Shader Nodes, Hydra, OpenGL
- CAD & Parametric Design: SolidWorks, MATLAB
- Data Visualization & Databases: Oracle, Excel, SQL, Plotly, Matplotlib, Tableau

Film & Multimedia Production

- Storytelling & Screenwriting: Final Draft
- 2D & 3D Animation: Toon Boom Harmony, Photoshop, Procreate
- Storyboarding & Scenography: Storyboard Pro
- Video Editing & Motion Graphics: DaVinci Resolve, After Effects, Premiere Pro

Languages

- Fluent: Spanish (Native), English (Bilingual/Native)

- Proficient: Portuguese (Spoken at home), Arabic (Intermediate)
- Basic: French, Japanese