César Matos

Creative technologist · Immersive environments for communities

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I build places people can step into: walk-in VR worlds at a NASA-legacy science center, the software my student senate runs on, and clean-energy research with high-schoolers, and I lead the people who use them.

EDUCATION

Framingham State University · B.S. Business Information Technology, Minor in Computer Science — May 2026

EXPERIENCE

Program Facilitator & CAVE Developer · Christa McAuliffe Center for Integrated Science Learning — Dec 2023 – Present

- Build immersive **Unreal Engine 5** environments for the Center's three-wall VR CAVE (nDisplay, Cesium), including a to-scale net-zero Shoppers World model with ~9,000 hand-placed elements, **premiered for the Massachusetts Secretary of Education and Senate President** at Mass STEM Week 2025.
- Created a reusable CAVE toolkit (data-driven walkable navigation, location-triggered pop-ups, walk/fly/drive starter scenes) with docs and tutorial videos so **staff can build their own scenes**.
- Built **Cave Slides**, a browser slideshow studio that syncs both CAVE PCs, uses a phone as the remote and launches Unreal scenes onto the walls.
- Now developing a **geothermal drilling training simulator** in the CAVE for hands-on procedure practice.

Research Mentor → Internship Manager · Perspectives of Earth (PETM), McAuliffe Center — Summers 2024 – 2026

- Led clean-energy research with **50+ MetroWest high-schoolers** across three summers, **twice funded by NASA Massachusetts Space Grant**.
- Designed an Arduino heat-monitoring system students built themselves (2024); turned the team's net-zero Shoppers World plan into a CAVE model (2025).
- Managed nine interns designing an all-electric campus library; led the geothermal team (48 boreholes vs. 94 baseline) and **co-authored the final report** (2026).

Planning Intern · City of Framingham · Mayor's Summer Internship Program, inaugural cohort — Jun 2023 – May 2024

- Analyzed U.S. Census data for the Framingham Housing Plan, supporting **$120,000** in Community Preservation funding for rental assistance.
- Led a parking study and presented the data to consultants, resulting in a **15% increase** in parking for a key project.

Energy Efficiency Program Assistant · MassEnergize — 2024

- Mass Save community education and trilingual **Solar Para Todos** outreach materials as a Solar Ambassador.

PROJECTS

SGA Sync · Founder, sole designer and developer · sgasync.com — Jul 2025 – Present

- Multi-tenant governance app (**React 19, TypeScript, Firebase, Gemini**) that runs Framingham State's student senate: live quorum, roll-call votes, auto-captured minutes and full legislation history.
- Designed **Ask Sync**, AI search that answers from the senate's own bylaws and minutes and **quotes its sources** (RAG); held launch until vendor data-use and FERPA wording were reviewed.

The Buddie System · Discord social world · JavaScript, Claude API, Firebase — 2026

- Draw a "bud," meet it through a guard-railed AI chat, and play live physics games with friends; built in about five days using **Claude Code**.

LEADERSHIP

Student Government Association — 2023 – 2026

- Senator → Treasurer pro tem → VP → **President**; managed a **$419K** student activity budget.
- Grew the senate from **6 to 32** members and spring turnout from **36 to 276** voters.

Orientation Leader — 2023 – 2026

- Welcomed **640** new students in one season with a team cut from 18 to 7.

Election Official · Lawrence, MA — 2020 – 2024

- Upheld election procedures, processed 1,800 ballots and assisted with translation.

HONORS

- President's Public Impact Award, FSU — 2026
- Inclusive Excellence Award, FSU — 2026
- Kathleen Comitsky Roberts Award — 2026
- NASA Mass. Space Grant Award (×2) — 2024, 25
- ECHO Award for Equity & Anti-Racism — 2025
- BPA, 2nd in state, VB/C# programming — 2019

SKILLS

Immersive: Unreal Engine 5 (Blueprints, UMG, nDisplay, Sequencer), Cesium, WebGL/GLSL

Software: JavaScript, TypeScript, React, Python, Java, C#, Firebase, Tailwind, Vercel

AI: Gemini & Claude APIs, cited RAG, guardrails, Claude Code

Also: Arduino, Census/GIS data, Excel · Spanish