Jaime "Gema" Alvarez Perez

They/Them — Multilingual Full-Stack Engineer — Advocate for Accessible Tech

EXPERIENCE

Aplos Creative - Grupo Cymez

Software Engineer II

08/2023 - Present

- Served as principal engineer on a bilingual logistics dashboard used to monitor and respond to real-time threats across northern Mexico
- Designed flexible content tools for operators to log high-context events, and built alerting systems to notify clients of nearby incidents along active routes
- Scoped, built, and deployed major modules for data correlation, media handling, and multi-language notifications, delivering a responsive, field-ready tool

USC Institute for Creative Technologies - Learning Sciences

Full-Stack Developer (Summer Intern)

06/2019 - 08/2019, 08/2021

- Developed an internal-use XML editing platform that accelerated content creation by 3× for AutoTutor instructional designers (View Project)
- Built an interactive progress tracker with contextual suggestions and hints, guiding content creators through lesson setup in a virtual tutoring app, reducing onboarding speed by 50% and improving lesson consistency (See Code)

PUEDE RGV (Nonprofit Advocacy)

Web Manager & Design Lead

01/2019 - 04/2019 (Live Site)

- Launched the organization's first digital platform with a multilingual WordPress site featuring a bilingual resource locator and newsletter system, reaching 600+ families in its first 3 months
- Architected and deployed the full tech stack (CMS, hosting, email), with the platform still in active use after 5+ years

UTRGV Department of Computer Science

Teaching Assistant

01/2021 - 08/2023

- Mentored 300+ students across advanced topics including robotics, game development (Unity), cloud architectures, and compiler design
- Automated grading workflows and managed required software deployments, saving 15+ staff hours per week

Social Systems Lab Assistant

09/2018 - 09/2020

- · Conducted human-robot interaction studies and supported the development and deployment of experimental protocols
- · Programmed behaviors for NAO robots used in social robotics research

SKILLS

Languages: JavaScript, TypeScript, Python, C++, GDScript **Frontend:** Vue (Vuetify, Pinia), React, Vite, Tailwind CSS

Backend: Node.js, Supabase, Prisma, REST APIs, Schema Design, Flask, Django, AWS, SQL, NoSQL

Game Dev: Godot Engine, Unity **Tools:** Docker, Git, Cypress

Design: Figma, Affinity Designer, Brand Design

Communication: Native fluency in English (US) and Spanish (MX)

EDUCATION

Master of Science in Computer Science - UTRGV

01/2021 - 05/2024

Thesis: Designing an Open Source Educational Platform for Students with ADHD and Dyslexia

Bachelor of Science in Computer Science — UTRGV UX/UI for Gaming Certification — ELVTR

08/2015 - 12/2020

10/2023 - 01/2024

LEADERSHIP

UTRGV ACM Chapter

President (2018), Vice President (2017), Secretary (2016)

- · Organized workshops and hackathons to foster technical skill development among 50+ members
- Built partnerships with faculty and industry contacts to expand professional opportunities

PROJECTS

· ACM/IEEE International Conference on Human-Robot Interaction - Student Design Competition

Designed the visual identity, mechanical systems, and software architecture for two research robots showcased at HRI conferences. Developed microcontroller-based control systems and implemented software for autonomous behaviors and real-time interaction. Integrated sensor and actuator systems to support physically grounded, emotionally expressive interactions aligned with experimental goals.

- Using Negative Affect to Reinforce Cooperation, HRI 2019
- Using Negative Affect to Reinforce Moral Norms in Casual Speech, HRI 2021