Esteban Romero

I aim to build interfaces that connect to the worlds within our minds and bodies.

Education

B.S. in Biomedical Engineering

August 2020 - June 2024, Tecnológico de Monterrey

Graduated with High Honors - 4.0 GPA & top 5% of class

Skills

Software Development

- Front-end development in *React*
- Immersive VR applications with *Unity* and *C#*.
- Interactive visuals with P5.js and Processing.
- 3D modeling and product design with Fusion 360 and SolidWorks.

UX & Design

UX & design experience with Figma and Illustrator.

Experience

MindHive · You: Quantified | Intern · Research Assistant

July 2023 - Present, New York University

Developer and Designer for You: Quantified [Link]

• Led the development and design of a web-based application aimed at connecting real-time streams of physiological data to visuals. This project is being piloted in K-12 schools in Boston and New York City.

Developer & UX/UI designer for the MindHive platform

• Formulated research methodologies and led the design of an Al-supported tool that fosters data engagement and analysis skills among high school students.

wavesense Student Club | Vice-President and Co-Founder

January 2022 - June 2023, Tec de Monterrey Guadalajara

- Led a 30+ member student club dedicated to neuroscience workshops, science outreach, and research.
- Worked on biofeedback-based videogames and installations such as Waterfall and Mutual Wave Machine.

Mynd Music | Creative Lead · Software Developer

September 2022 - January 2023, Tec de Monterrey Guadalajara · Laboratorio de Arte AC

- Designed and programmed a Unity-based VR experience, providing real-time auditory feedback corresponding to users' emotional states correlated from EEG frontal-alpha-asymmetry.
- This project was presented and demoed at incMTY 2022 to positive participant responses.

Publications and Conferences

Capturas de los Paisajes de la Mente

Speaker - TEDx Tec de Monterrey Guadalajara, September 2022 [Link]

• Talk about the future of immersive adaptive and realistic environments, from the perspective of generative art, video game development, and human-computer interfaces.

Wearable Biosensor Technologies in Education

Publication - Sensors [Link]