# **ALEJANDRO ROMERO**

## DESIGNER / DEVELOPER

#### **EXPERIENCE**

#### NASA Ames / VR + UX Intern

Aug 2020 - Dec 2020 | Mountain View, CA

- Designed and implemented features in VR app allowing both expert and casual users to explore Mars using real MSL rover data
- Created engine from scratch for querying NASA databases and parsing millions of data points
- Wrote and optimized algorithms for sorting datapoints and efficiently presenting them to the user via GUI
- Designed and coded UI element interactions

### NASA Glenn / Human-Computer Interaction Intern

Jun 2020 - Aug 2020 | Cleveland, OH

- Worked on VR/AR + UI/UX solutions in various NASA projects at Glenn Research Center's Graphics and Visualization lab
- Collaborated with R&D experts to design applications by use of natural user interfaces and remote collaborative experiences
- Defined key design and implementation decisions

### Infina, Ltd. / Interactive Prototyper Intern

Jul 2019 - Sep 2019 | McLean, VA

- Developed interactive apps for the Federal Aviation Administration (FAA)
- Live demoed projects to CEO, VPs, Directors, and groups of over 30
- Wrote optimized scripts in C# and created user interfaces
- Integrated VR, AR, infrared tracking, live webcam feeds, and voice recognition to enhance app accessibility

#### **Brown Biomechanics Lab** / Research Assistant

Feb 2018 - May 2020 | Providence, RI

- Built interactive 3D visualization programs and presented to team of 10
- Defined an application's core user journey through mockups
- Worked with postdoctoral and PhD researchers using XROMM imagining/tracking software to convert CT scan data into 3D models
- Developed independent research project allowing users to visualize martial art techniques from motion data

## **3D Perception Lab** / Research Assistant + TA

Feb 2019 - Mar 2020 | Providence, RI

- As a teaching assistant, taught students about object-oriented programming, data structures, and 3D software to create applications
- Wrote C++ code to generate experimental stimuli and manage data input for NSF funded projects
- Created workflow for applying accurate, real-world infrared coordinates to 3D models in Unity to study user behavior

#### A.R.Works / Freelance

Jan 2018 - Present | Dorado, PR

- Worked with clients to create logo designs, book covers, animations, photo edits, and videography – platform audience of over 1,500
- Published The Fortress, a science fiction novel available via Amazon

- <u>alejandro\_romero@brown.edu</u>
- s alejandroromero.me
- in linkedin.com/in/alejandrojromero

#### **EDUCATION**

#### **Brown University**

Computer Science, B.A. (4.0 GPA)
Psychology, B.A. (3.96 GPA)
Sep 2017 - May 2021 | Providence, RI

Programming • UI/UX • Visual computing • Design • VR/AR • Animation • Deep learning • HCI • Cognitive Science • User Psychology

#### **ACTIVITIES**

#### **Brown Taekwondo** / Instructor

Taught curriculum to classes of children, university students, and adults. Helped organize team events & coach competitors.

#### Mosaic+ / Member

Active member of Mosaic+ community to make Computer Science more accessible to underrepresented groups.

#### **US Coast Guard** / Volunteer

Beach cleanup volunteer. Helped lead clean-up activities on base.

#### **SKILLS**

**Technical** Java • Python • C# • Unity R • MATLAB • JavaScript • HTML/CSS • Blender • Adobe Creative Suite

**Design** Illustration and UI graphics • 3D modeling and rendering • Concept sketching • Wireframes and mockups with Figma and Illustrator • User flows • Design Critique • Prototyping

**Research** Task analysis • Persona hypotheses • Data analysis • A/B testing and iteration • Cognitive walkthrough

**Languages** Native English • Native Spanish • Limited Latin • Limited Korean