# Ryan Winstead

XR developer with a background in UX

ryanwinstead.com winsteadwork@gmail.com Github.com/rwinstead (270) 836-6048

# Experience

#### Software Engineer Associate (VR)

Volkswagen Group of America, Aug 2021 – Present

**Currently lead the Mixed Reality Lab** at VW's Innovation and Engineering Lab California, developing mixed reality prototypes of future vehicle concepts using Unity + C#, with Vive, Varjo, and Oculus hardware. Integrate working vehicle hardware via MQTT with VR and passthrough to simulate vehicle interiors and enable user testing of products.

**Delivered a prototyping tool** built in Unity that enables designers to rapidly edit and share vehicle designs in VR. In the app, users can place and move objects, and modify materials, textures, and shader properties of 3D models in real time. Edits can be shared, downloaded, and sent to other users. The app has been deployed on several VW projects.

#### Lead Unity developer

DILAC Lab at Georgia Tech, May 2020 - May 2021

**Led a team of Unity developers** on the creation of <u>Dino-Store</u>, a game that explores the consequences of public policy and personal choices while shopping in public during COVID-19. Submitted to IndieCade 2021.

**Engineered a COVID** <u>epidemiological model</u> in **C**# for Dino-Store in partnership with a COVID-19 researcher at Georgia Tech. Presented the package at IndieCade's Jamming the Curve event and made it available to the public.

## Software developer

Atlanta City Government, Aug 2020 - May 2021 (Master's project)

**Developed the backend of NoMasDesalojos.com**, a tool that helps tenants file the CDC moratorium on evictions. Backend is built in Flask (python), which uses Twilio, DocuSign, and Bitly APIs to text the user a pre-filled CDC letter.

**Sole developer** of the <u>Mi Casa Mis Derechos</u> (MCMD) mobile website, built in Gatsby (React). MCMD uses visual storytelling to help tenants understand their rights in crisis situations.

## Education

#### Georgia Institute of Technology

Aug 2019 – May 2021 MS in Human Computer Interaction

#### **University of Kentucky**

Aug 2011 – May 2015 BA in English Literature BA in Gender Studies

#### Skills

## Unity

C# scripting, VR, UI, animation, rigging, networking, shaders, AI, 3D physics, lighting

## Programming

C#, Python, SQL, Javascript, CSS, Git, MQTT

#### Design

Figma, Illustrator, Blendr, Miro