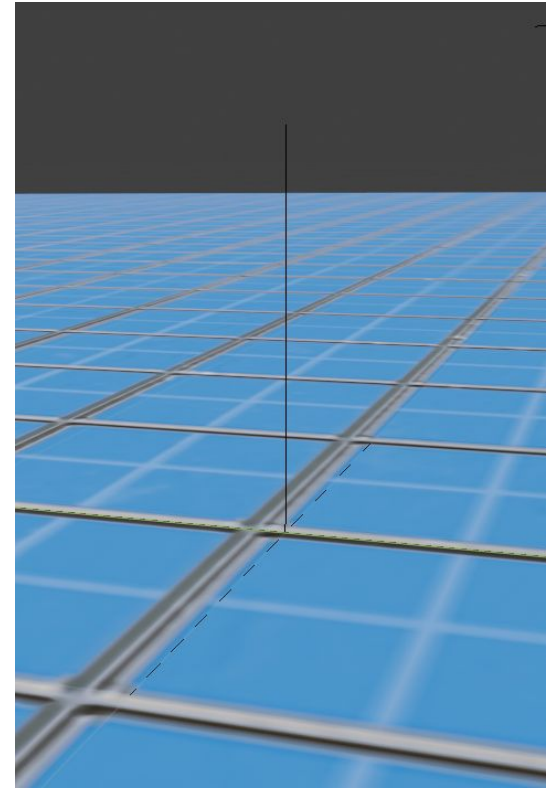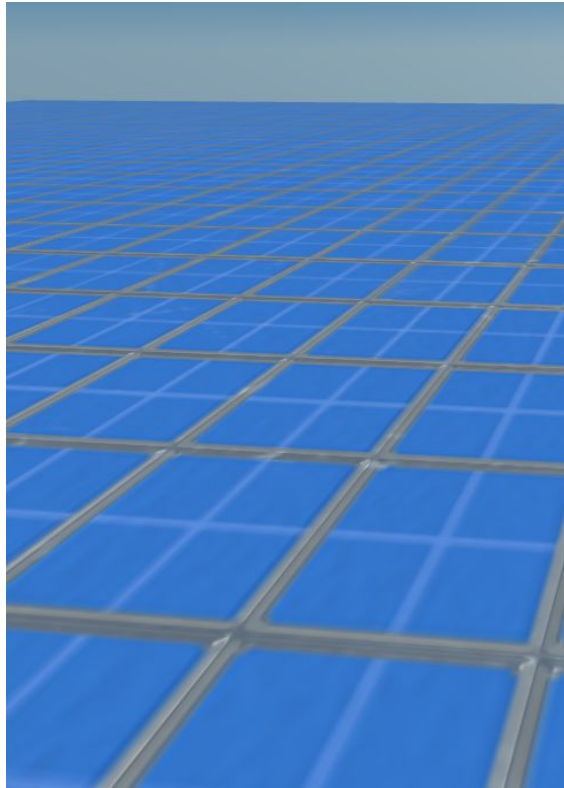# Authoring immersive environments with glTF for multi-user mixed reality web applications

Liv Erickson, Mozilla

Image: 3D models of three robots, representing users, gather around a 3D model of a house on a table in front of them.

Images: A glTF scene that includes a custom component, 'spawn-point', displayed in three clients. They each are visualized differently.
Left to right: Spoke, Hubs, Blender

"I think it's a room with a large window."

Image: a 3D environment of an empty conference room. The automatic captioning does not provide much information about what is contained in the image, only describing that it is a room with a large window.

52

5

share

Blue-Billed-14977

Shelduck-

- pen
- the pen's color and size
- h the pen
- stroke
- the pen

raw *on* a duck

- spawn a camera
- smile
- take a p

VIDEO

lize this drawing (must be signed in)
- e the drawing
- pin it!

CatBatch

hit ctrl-[1-7] and test search + spawn of

VRML
NATURAL REALITY MODELING LANGUAGE

APP

hubs room link

- pause the video
- play the video

HLS

turn a few p
this PDF
Watch anime for half an hour

Shelduck-19386 left.

Canvasback-14058 joined the lobby.

Send to room...

Feedback

30 FPS

Image: a visually busy 3D environment that includes floating text, image text, chat text, a loading cube, a PDF file, a video, five images of cats, a media browser, 2 users represented as robots, and two 3D models of vehicles

Looking Ahead

- Encourage and support research into spatial accessibility structures
- Support and experiment with alternate text components for objects
- Implement application-specific ways to surface room information to a user, such as gaze or mouse-based captioning
- Captioning and audio controls for room audio
- Continue learning and adapting to new information