

# Selected Topics in HCI

Fall Semester 2025

## Exercise 05 - Virtual & Augmented Reality

Based on this [example repository](#), create a winter-themed augmented reality app that lets you place virtual snowmen or pine trees (or both) on a flat horizontal surface, such as your floor, your desk, etc. Note that the augmented reality engine in the browser will automatically choose the largest horizontal surface in view as ground plane when you tap the “AR” button.

Hints:

- You can either find and use a suitable [GLTF model](#) for your 3D objects, or construct them directly from [geometry objects](#) such as cones, cylinders, and spheres (these are well suited for both snowmen and pine trees).
- The AR engine will only work properly if the page is accessed via HTTPS. Therefore, you need to a) fork the Github repository to your own account, and b) enable Settings -> Pages -> Branch (main/root) for your own fork of the repo. The page will then be available at [https://YOUR\\_GITHUB\\_USERNAME.github.io/aframe-ar-example/](https://YOUR_GITHUB_USERNAME.github.io/aframe-ar-example/).
- Currently, you can only use Chrome on Android, any alternative browsers (including Safari) are unsupported at the moment. You can still use any other browser to preview your scene without AR features, though.

Bonus task: modify the code for the [ar-hit-test](#) component to spawn a new snowman/pine tree when you touch the screen, instead of moving the pre-loaded model(s).