Experience Commons AR Software

Here's a sampling of the AR tools you can use to create, manipulate and share Augmented Reality creations.

AR Experience Creation

Adobe Aero

A free tool (if you have a Creative Cloud subscription) that allows you to create multi-object AR experiences with animation and physics. For iOS. A beta version for Mac is available. Output files can be large.

Apple Reality Composer

Like Aero, this free MacOS/iOS tool allows you to create AR experiences with animation and physics. It inputs .usdz files and outputs .reality and .usdz files. The .usdz files can be small enough to upload to Sketchfab.

Apple Reality Converter

This MacOS software allows you convert .obj files to .usdz for Reality Composer.

Object Capture

<u>qlone</u>

Available for iOS and Android. This tool makes a checkered scanning mat on which you place the items you want to scan. HPL's Makerspace has mats available.

3DF Zehphyr Free

This free Windows software allows you use up to 50 images to create a 3D model.

Polycam

Polycam was first designed for iPhones with LIDAR sensors. But the latest version allows any iPhone to use of it. Really good for scanning relatively flat, linear surfaces (It was used to scan the graffiti wall in Sketchfab).

<u>Trnio</u>

This is a great photogrammetry tool for scanning medium-sized objects.

PhotoCatch

This app is for iOS and Mac. It makes use of the Object Capture tools built into the Monterey edition of MacOS. It is fast and accurate and produces excellent models.

everypoint.io

Everypoint works on iPhones with a LIDAR sensor. Good for capturing outdoor scenes.

Metashape

Fantastic, but a tad complex tool for stitching together hundreds of photos from drones or complex scans. Can take hours to render complex images even on high-end graphics machine. But, it's the best at handling large numbers of images.

3d Scanner App

This is a LIDAR-based scanning app. Good for rooms.

Canvas.io

Fantastic tool for scanning interior spaces and linking them together. Getting the final model out of Canvas and into Reality Composer requires a couple of software steps because Canvas creates an .obj file with multiple texture .jpegs. Those .jpegs need to be compressed into one file or Reality Composer will choke on it.

Model Building

Tinkercad

A free online tool for making simple to moderately complex 3D models which can be projected in the real world as AR objects.

Blender

A free, multi-purpose 3D modelling and rendering tool. A complex interface with a steep learning curve, but produces good results.

Shapr3D

This is a powerful 3D and CAD modelling tool for the iPad and Mac. It is loaded on computers in Makerspace computers. Best for non-organic objects. It's extremely precise and can project models into the real world as AR objects. Creates small .usdz files.

Model Manipulation

Meshlab and Meshmixer

Both tools are good for repairing and trimming 3D models. They're complicated to learn but can fix bad scans.

Model Hosting and Sharing

<u>Sketchfab</u>

The Pinterest of 3D models. This is where Experience Commons shares all models.

