

3D Scanning DIY Project

Description: Now that you've completed the 3D scanning modules, it's time to design and create a unique project. You can create anything you choose as long as it satisfies the requirements listed below.

This is your time to create! Have fun with it.

Requirements: For this project, you must reverse engineer an object and then 3D print an accessory for it. Examples include an instrument, shoes, bags, etc.

Deliverables: You will need to submit the post-processed 3D scan file, the OnShape accessory file, and a picture/video of the accessory on the object (include as many angles as necessary to demonstrate its functionality, appearance, features, etc.).

Grading: You will be graded as followed.

	0 pt	3 pts	5 pts
Accessory Fit	The accessory does not fit.	The accessory fit is okay.	The accessory fits the original part as intended (not too large or small).
Quality of 3D Scan	No post-processing performed on the scan.	At attempt at post-processing was made	The 3D scan was post-processed.
Creativity	The scanned object did not need to be 3D scanned (i.e. measurements can be easily found online/could've measured with a caliper).		Very creative implementation of the learned skills.

Example:



In the Makerspace, we used the Structure Sensor to reverse engineer the curvature of our TV stand. We then 3D printed a case that fits snugly and holds the HDMI cord.