

# ARCritique

Supporting Remote Design Critique of Physical Artifacts through Collaborative Augmented Reality. Y. Li, D. Hicks, W. S. Lages, S. Won Lee, A. Sharma and D. A. Bowman. 2021 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW). 2021

# Idea

- Scan a model
- Upload it
- Share and interact with people in real time

# 2 Main Components

- KinectFusion based processing algorithm that generates virtual model
- ARKit working with Photon Engine to provide share viewing

# Model preparation

- Uses KinectFusion based processing algorithm on the image and depth data captured
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# Collaboration using ARKit

- Allows users to view object from multiple angles
- Allows pointer option where a ray is shown from users phone to the object and shown on all connected devices

# Issues

- Depth camera only on the front, not on the back hence model building is difficult (we get depth map from the two cameras so can be worked out)

**Thank you**