Design Printing and Scanning WG meeting Sept 16 2021

Folder for submitted documents:
https://drive.google.com/drive/folders/1IRvhiUGSnhA4j--6QQ0rDmpbmnQivRfY?usp=sharing

Zoom Channel:
https://us02web.zoom.us/j/81634670698?pwd=a1VPeU5tN01rc21Oa3hScUlHK0Rxdz09

1. NIST's STEP to X3D to "Extended reality" project
   a. News release:
      https://www.nist.gov/news-events/news/2021/08/new-pipeline-visualizes-step-and-qif-data-using-augmented-reality
   b. Publication Page:
      https://www.nist.gov/publications/visualizing-model-based-product-definitions-augmented-reality
   c. Paper manuscript: (please do not distribute the manuscript from this DPS wg folder)
      📄 932063.pdf
   d. This is a Unity application. The CAD models are imported into Unity from X3D files that were created from STEP files by the NIST STEP to X3D converter, and the PMI data was extracted from the STEP file by the NIST STEP file analyzer. Import into Unity was accomplished with code in C# run as a unity script that supports a minimal node set required to map the X3D files into Unity nodes.
   e. The Augmented reality is implemented by Vuforia, a software engine developed as a commercial product by PTC (Parametric Technology, CAD).