

Color Capture

Background

We are often asked if we can capture color as part of the 3D scan. This is particularly useful for animators or digital artists that need to start with a highly detailed 3D model of a real object, that captures not only the 3D shape and intricate details, but the color texture as it is mapped to the 3D surface. This is no easy task. Color adds a new element of complexity, and requires special processes to ensure that the colors map evenly on surfaces of varying contrast and gloss. Beautiful color capture is an art, and we are continuously improving our processes to provide the best possible combination of 3D detail and high resolution color.



Our process

We selected a shoe specifically for this example that showcased the level of detail possible with full color capture. We captured the shoe from all angles, under controlled lighting to ensure that the colors reproduced true to life. The color was then reprojected on to the 3D scan to form 8k texture maps (64mp), perfectly mapped to all of the visible surfaces.



The results

The shoe is visually stunning at any angle. The color maps cleanly on all of the visible surfaces, and even the highly polished sole shows a clean, even coloring that is suitable for digital rendering. The high resolution color maps bring out additional details that didn't resolve in the 3D scan, such as the fine fingerprint pattern on the bottom of the cleats. The stunning color maintains its detail even on low-resolution 3D models, suitable for web rendering or digital catalogs. Would you like to see this example in your own 3D environment? Contact us for a link to the original file.

