

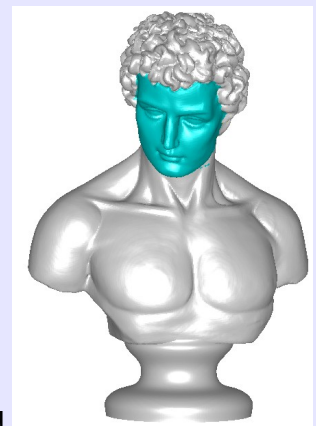
Digital Face Off

Background

When a client wanted to create bust models for bronze casting, he asked us if we could quickly and accurately capture the details of a living human face. Not only could we successfully capture the face, we explored new applications for face scans, and put together a set of bust models for our own enjoyment.

Our Process

We first brought in a half-scale vinyl replica bust of Apollo. We scanned the entire surface, and recreated the original bust in digital 3D. The region of the face was separated from the rest of the scan mesh, so it could be removed later. We then made a series of face scans, using a fast white-light scanning process that could safely capture human faces, even with the eyes open. The face scans were cleaned up, and scaled down to fit over the original sculpture. We used a best fit algorithm to correctly position the faces, using the original sculpture as a reference, and then merged the new face scans to the original model. The new sculptures were finished and ready for direct printing in 3D.



The Results



In less than an hour, we were able to scan the original bust model, and each of our faces. With a little post processing and cleanup, the results were a surprisingly well crafted bust that reproduced the shape of our faces with extraordinary detail. While this may not constitute great art, it certainly demonstrates the power of 3D scanning.