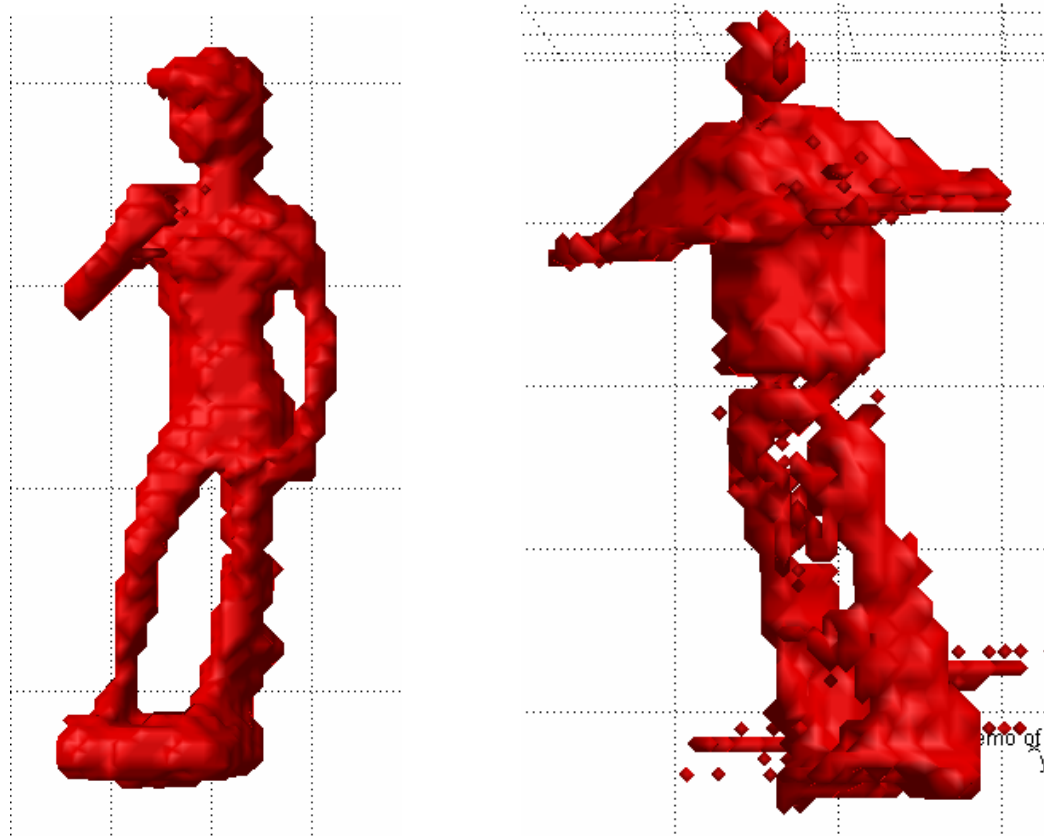# 3D Photography – Assignment 5

Georges Baatz

The visual hull of the David statue is generated by *david.m*. And that of the pillar sequence by *pillar.m*. In the pillar sequence, the background images do not align with the corresponding foreground images. Therefore, good silhouette extraction is impossible. Still, in the result, a human shape is clearly recognizable, since the artifacts from the silhouettes were not consistent across views.

Silhouette Extraction
For the David sequence, a pixel is considered to be background, if its gray value is below a certain threshold. For the pillar sequence, a pixel is considered to be background, if its distance to any of the background images is below a certain threshold.

Visual Hull
A voxel is carved away if there is a view which sees that voxel and maps it to a background pixel. Unobserved voxels are never carved away.

Number of Cameras
The more cameras used in the computation, the better the resulting reconstruction is. That is because in that case, more superfluous voxels can be carved away.