

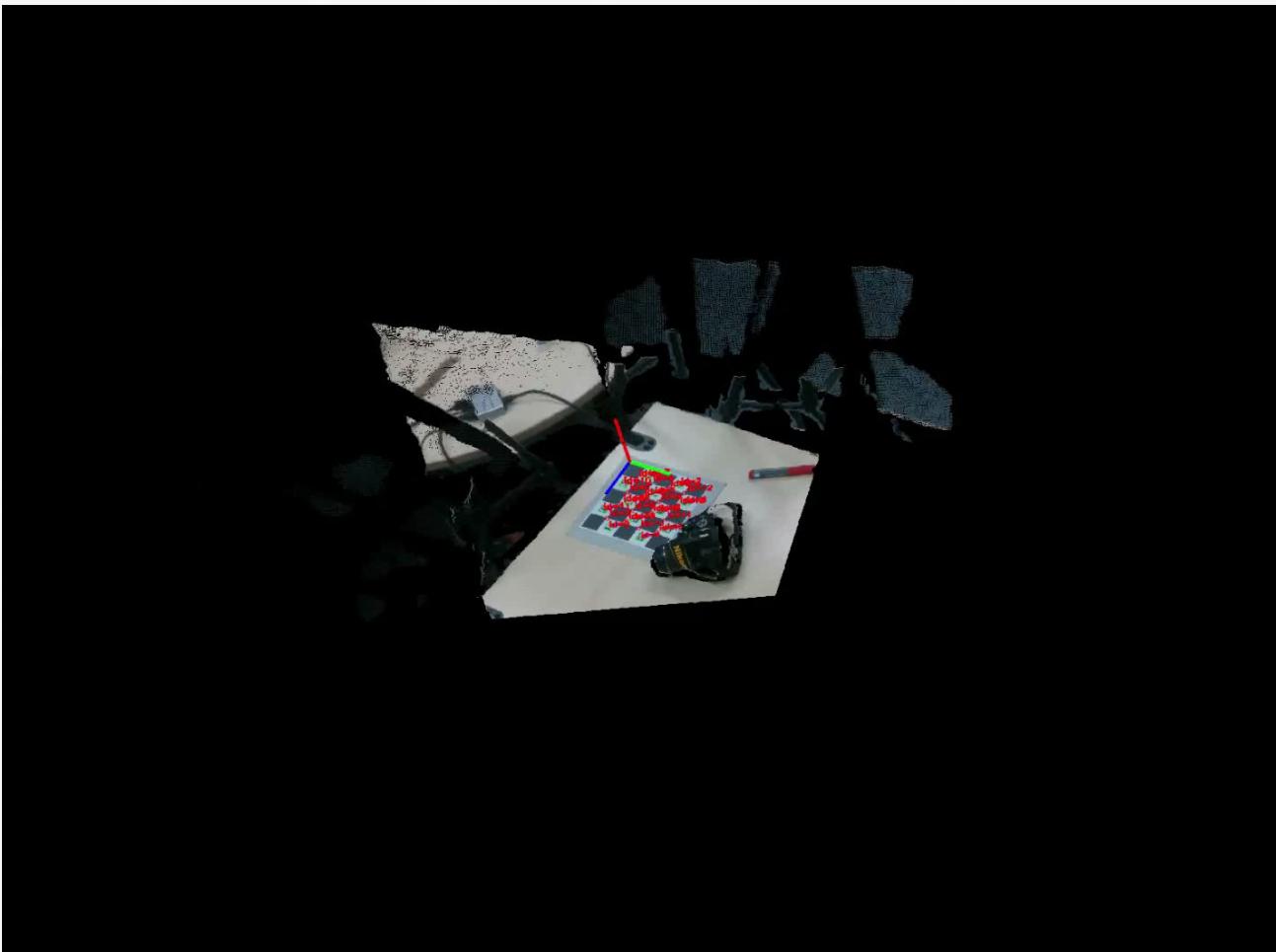
# *3D Scanning and Spatial Learning*

## *Multi-view 4D Volumetric Capture*

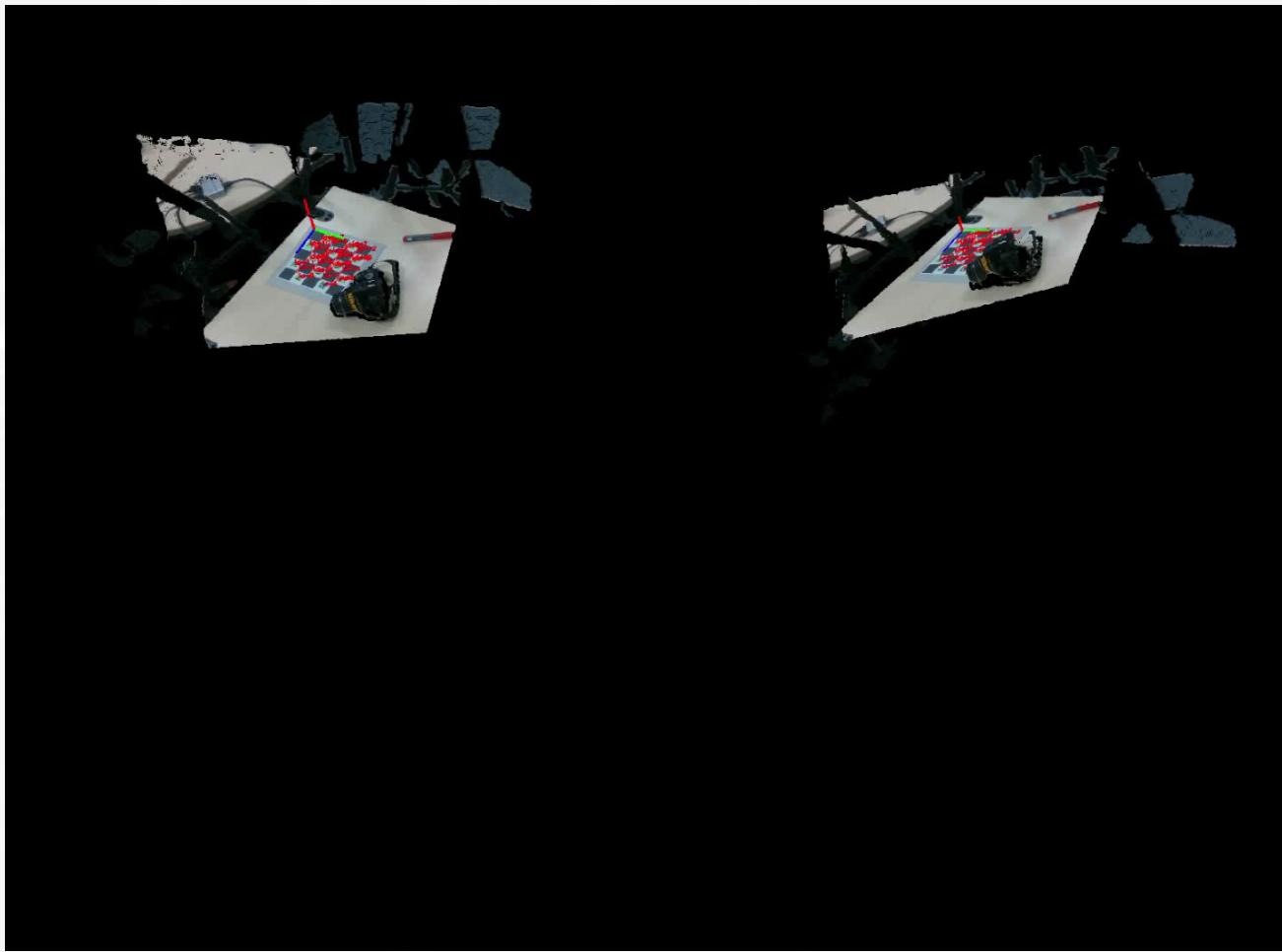
Marcel Bruckner, Kevin Bein, Moiz Sajid



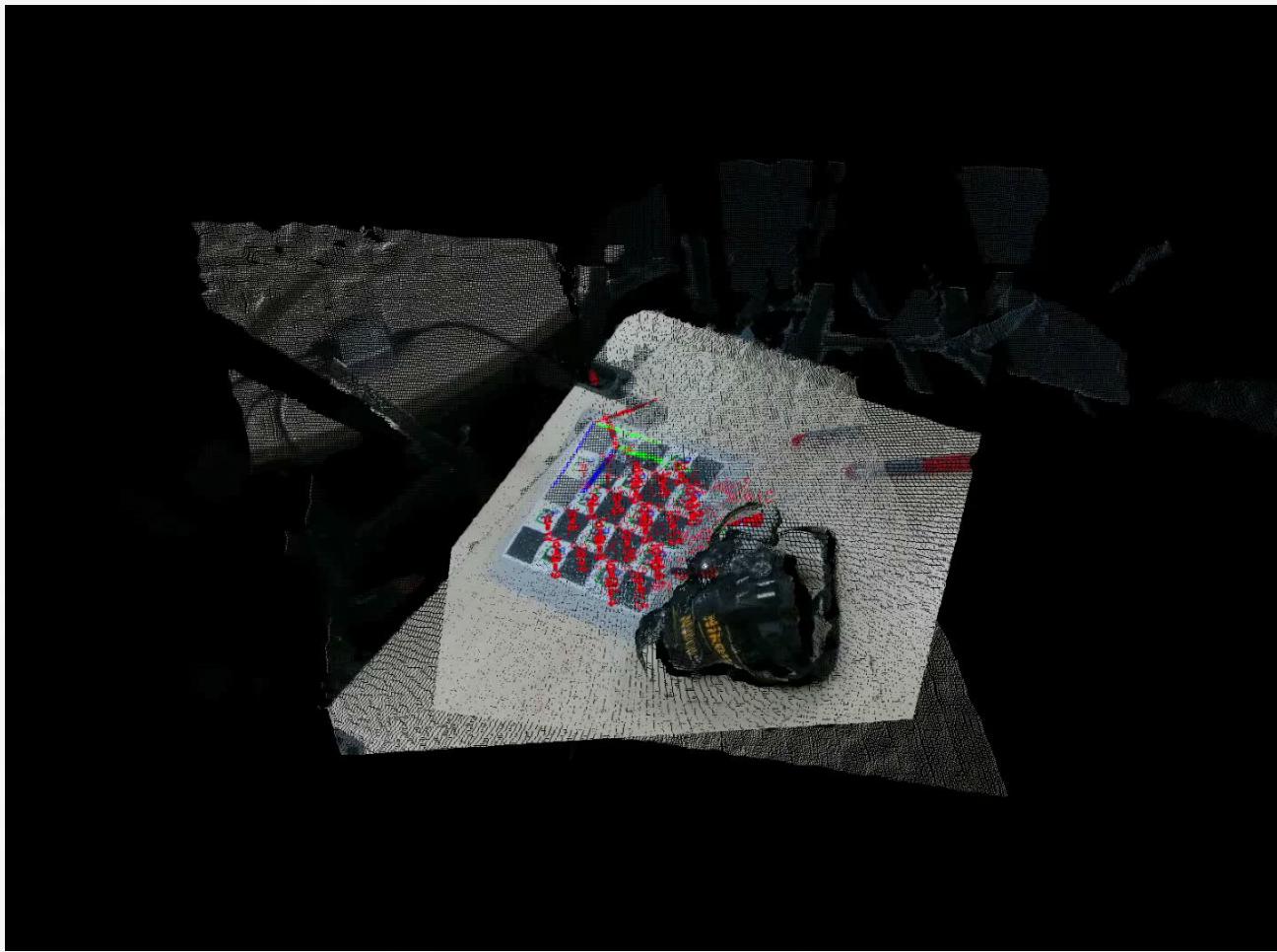
# Current Work – Optimization



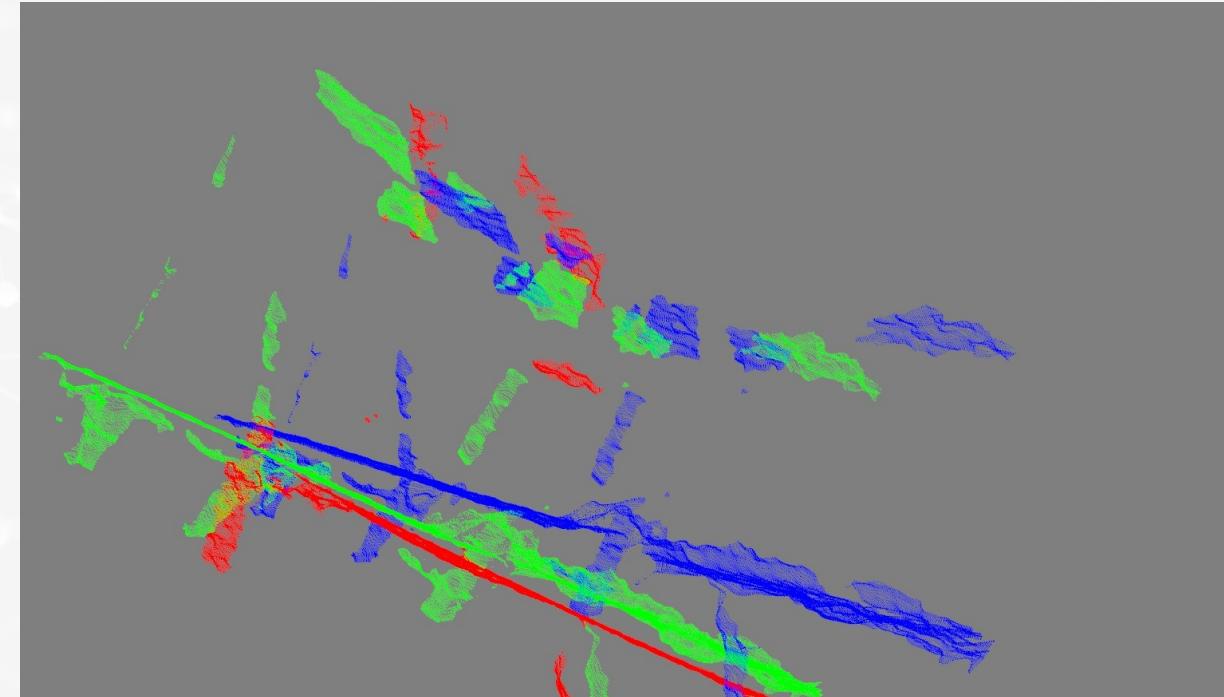
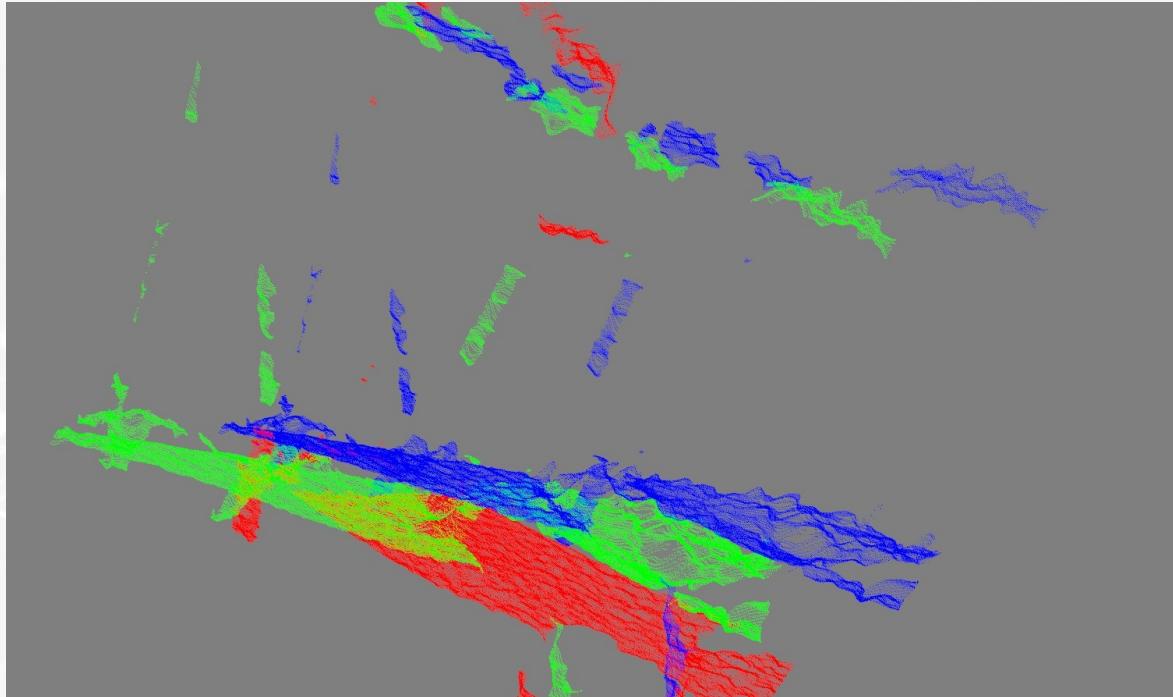
# Current Work – Optimization



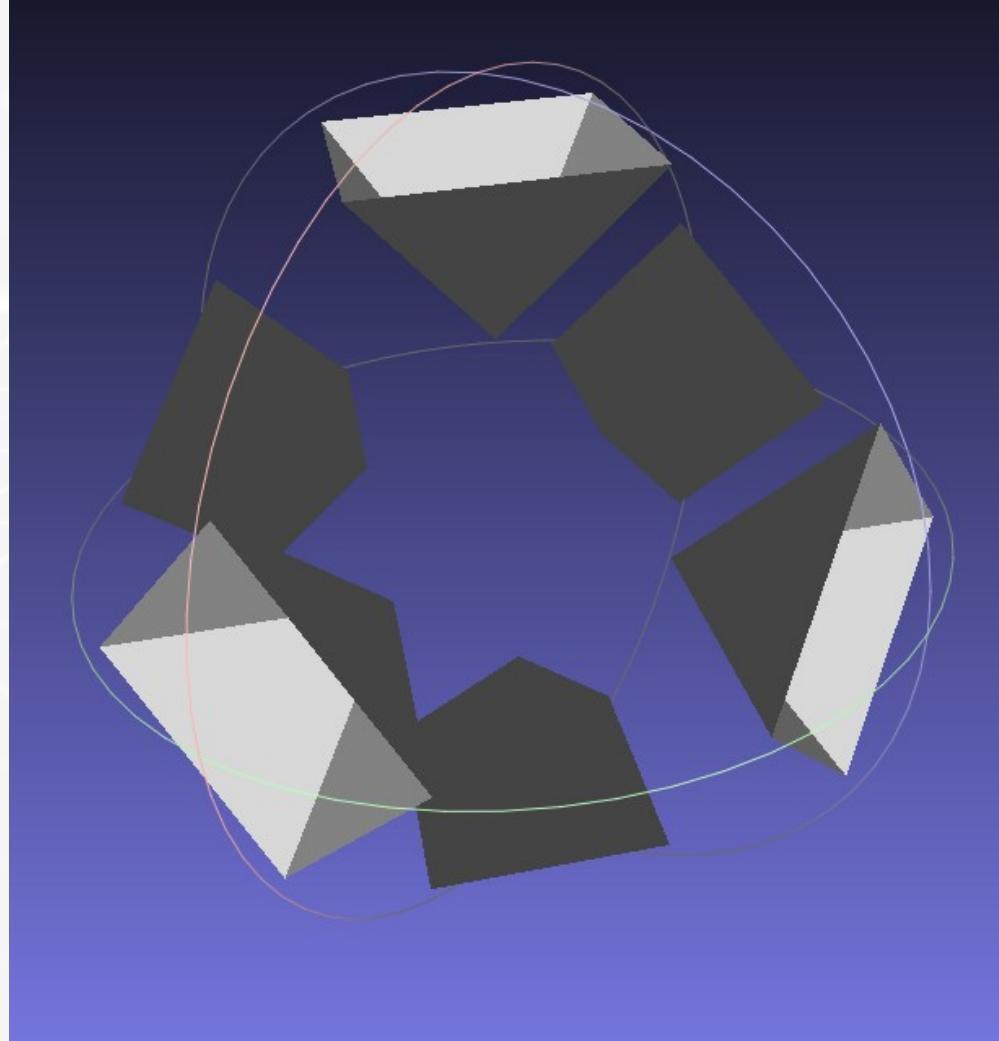
# Current Work – Optimization



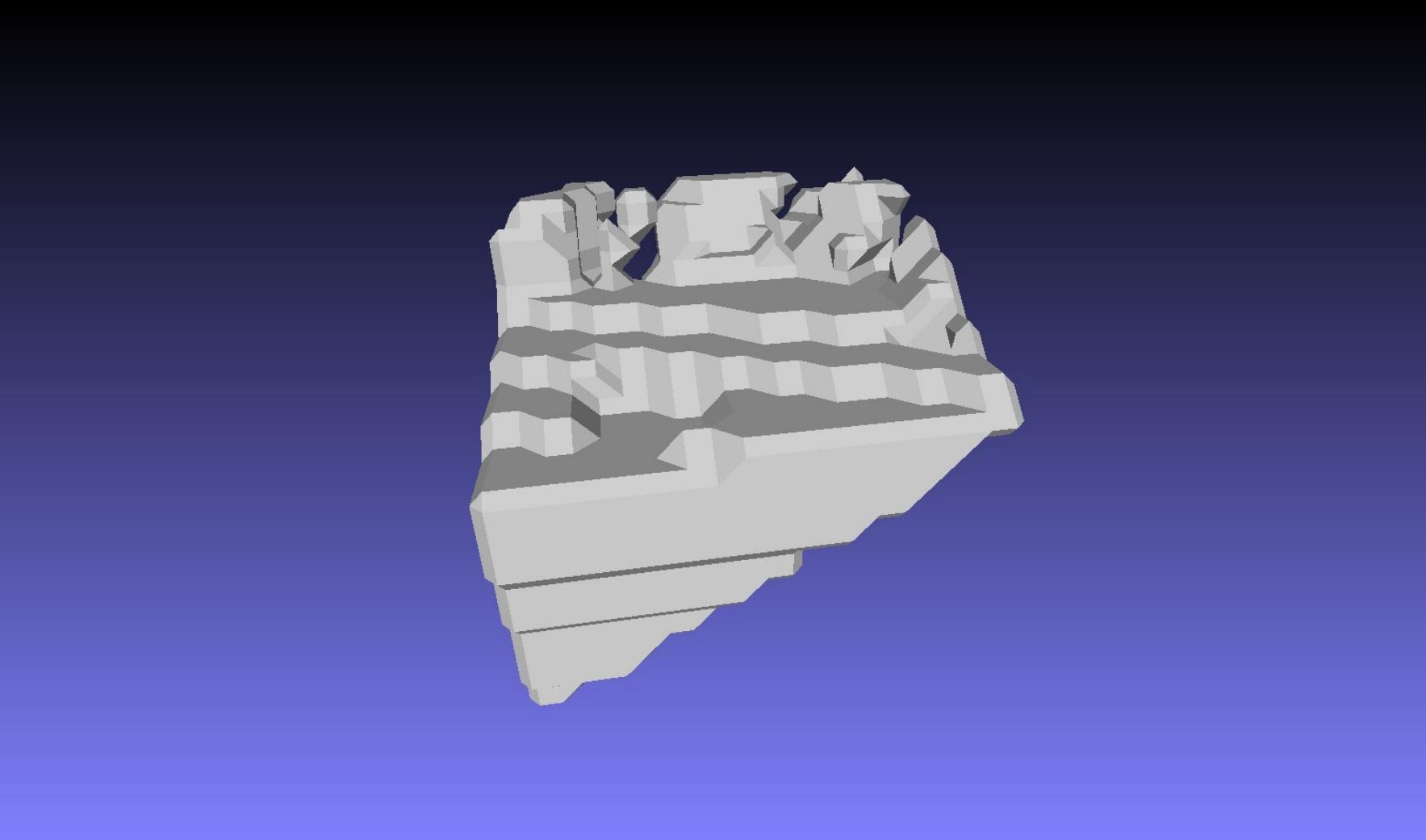
# Current Work – PCL



# Current Work – Voxelgrid & Marching Cubes



# Current Work – Voxelgrid & Marching Cubes



# Future work

- Optimization
  - Finish Ceres point correspondence error optimization
- Volumetric Fusion
  - GPGPU implementation of voxelgrid / tsdf
  - Marching cubes for extraction of isosurface
- Point Cloud Library
  - Integrate PCL for surface extraction and ICP

A faint, abstract background consisting of a network of white dots connected by thin lines, forming a mesh-like pattern across the entire slide.

# Thank you!