3D OBJECT RECONSTRUCTION

USING MICROSOFT KINECT

PIPELINE

- 1. Acquiring Input Data
- 2. Pre-Processing
- 3. Segmentation
- 4. Feature Estimation
- 5. Registration
- 6. Post-Processing
- 7. Visualization and Object Reconstruction

STAGE 1: ACQUIRING INPUT DATA









STAGE 2: PRE-PROCESSING





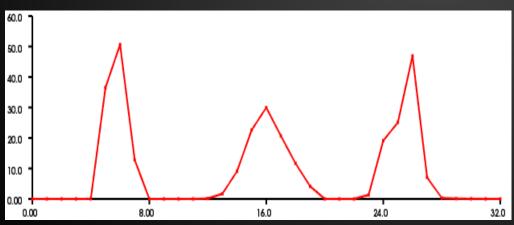


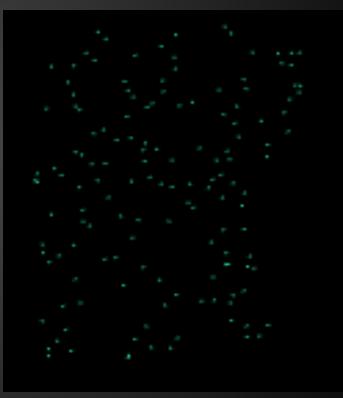
STAGE 3: SEGMENTATION



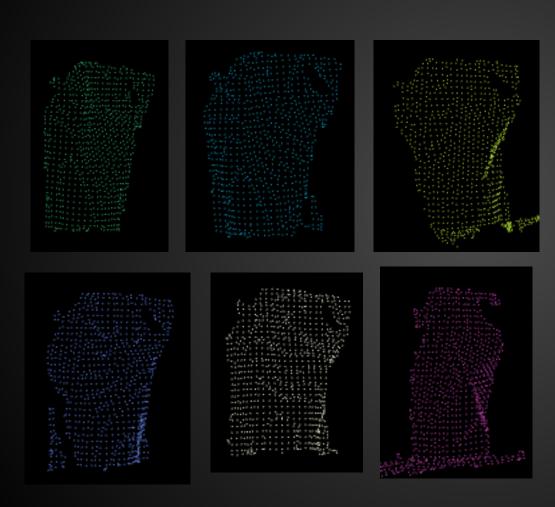
STAGE 4: FEATURE ESTIMATION

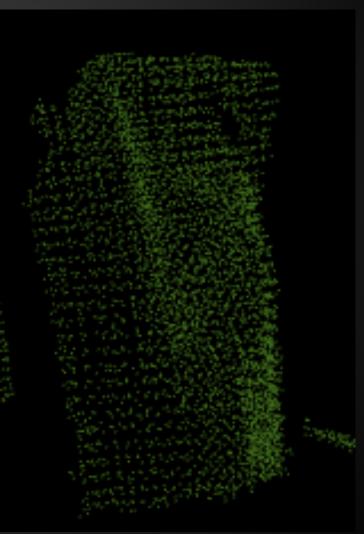




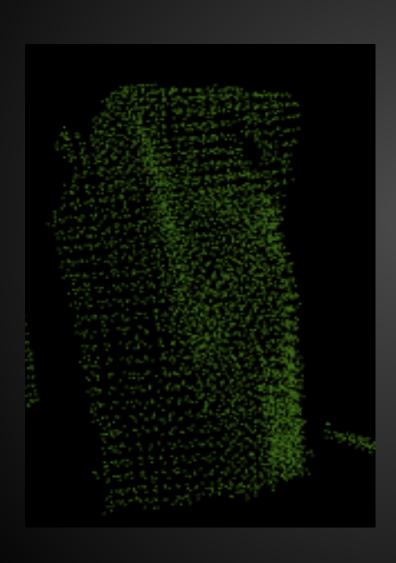


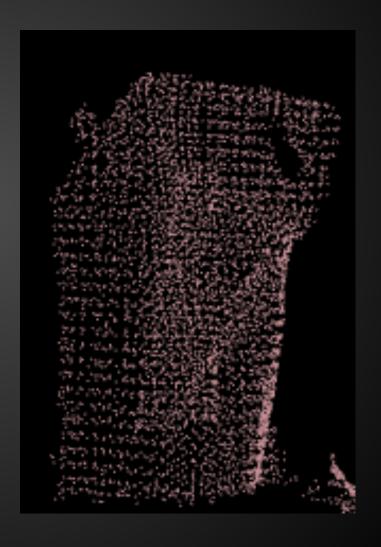
STAGE 5: REGISTRATION



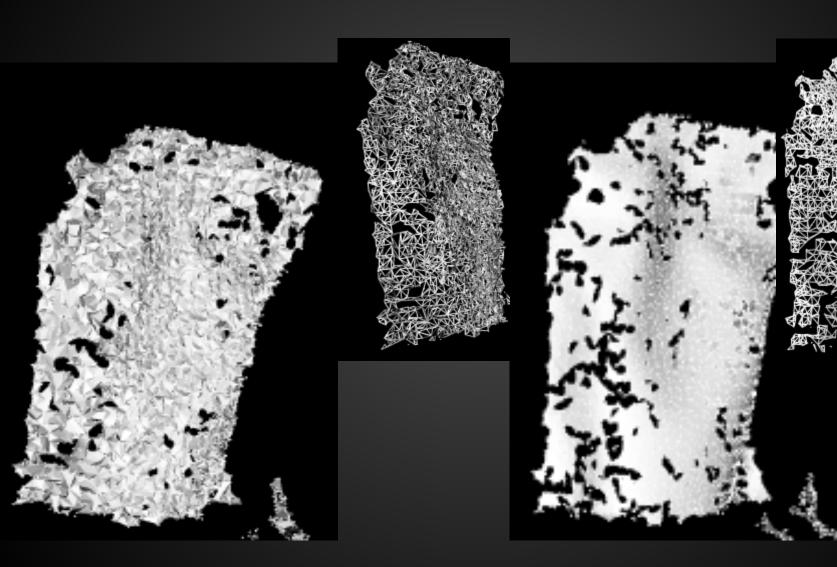


STAGE 6: POST-PROCESSING





STAGE 7: VISUALIZATION AND OBJECT RECONSTRUCTION



FUTURE WORK

- Reconstruction Studio
- Fine Tuning Parameters
- Mobile/Web App
- 3D Printing
- Video-Based 3D Reconstruction
- Process Automation
- RGB Reconstruction