

# A Dynamic Surface Reconstruction Framework for Large Unstructured Point Sets

*Rémi Allègre, Raphaëlle Chaine, Samir Akkouche*

LIRIS CNRS / Université Lyon 1, France

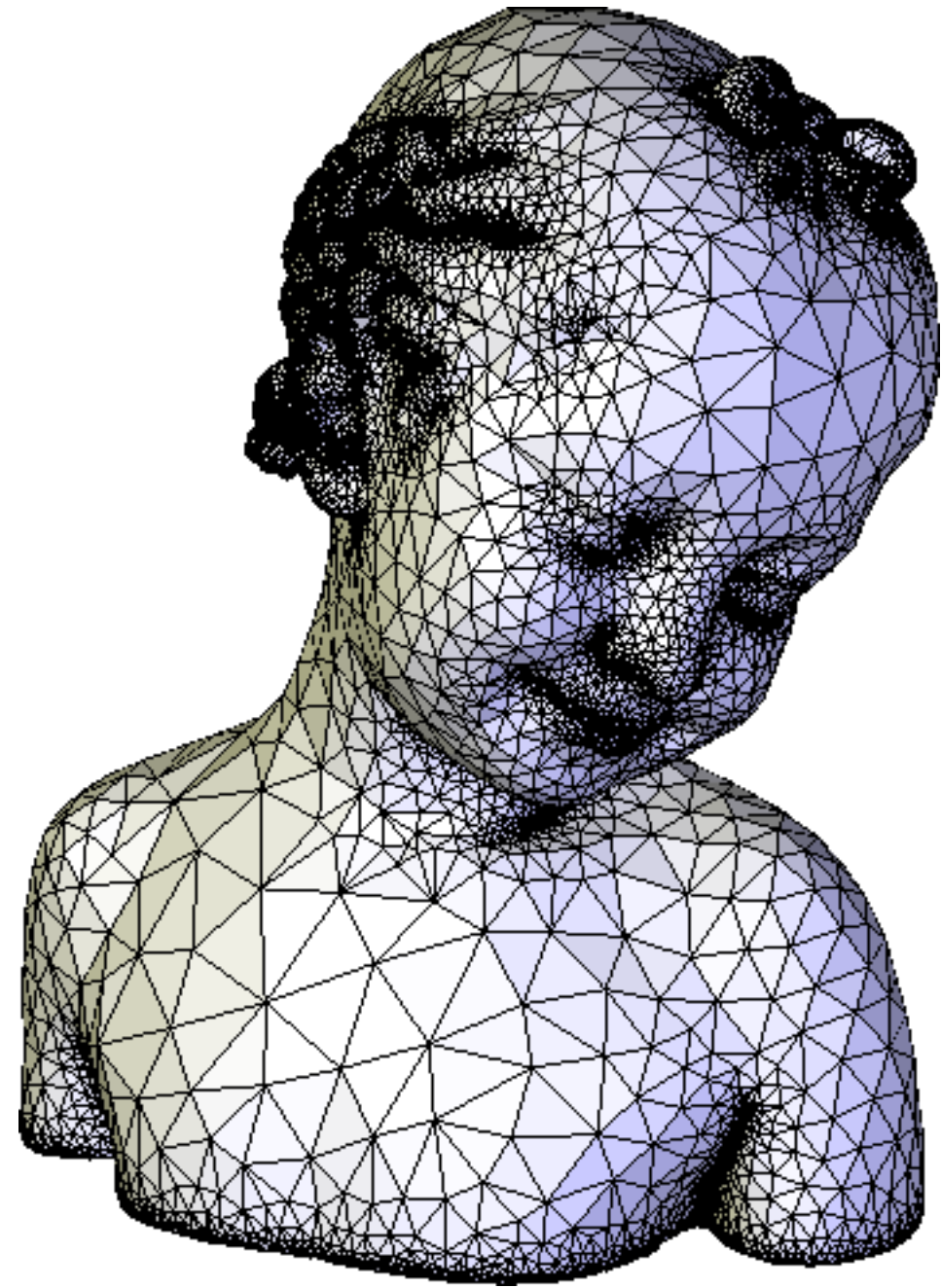
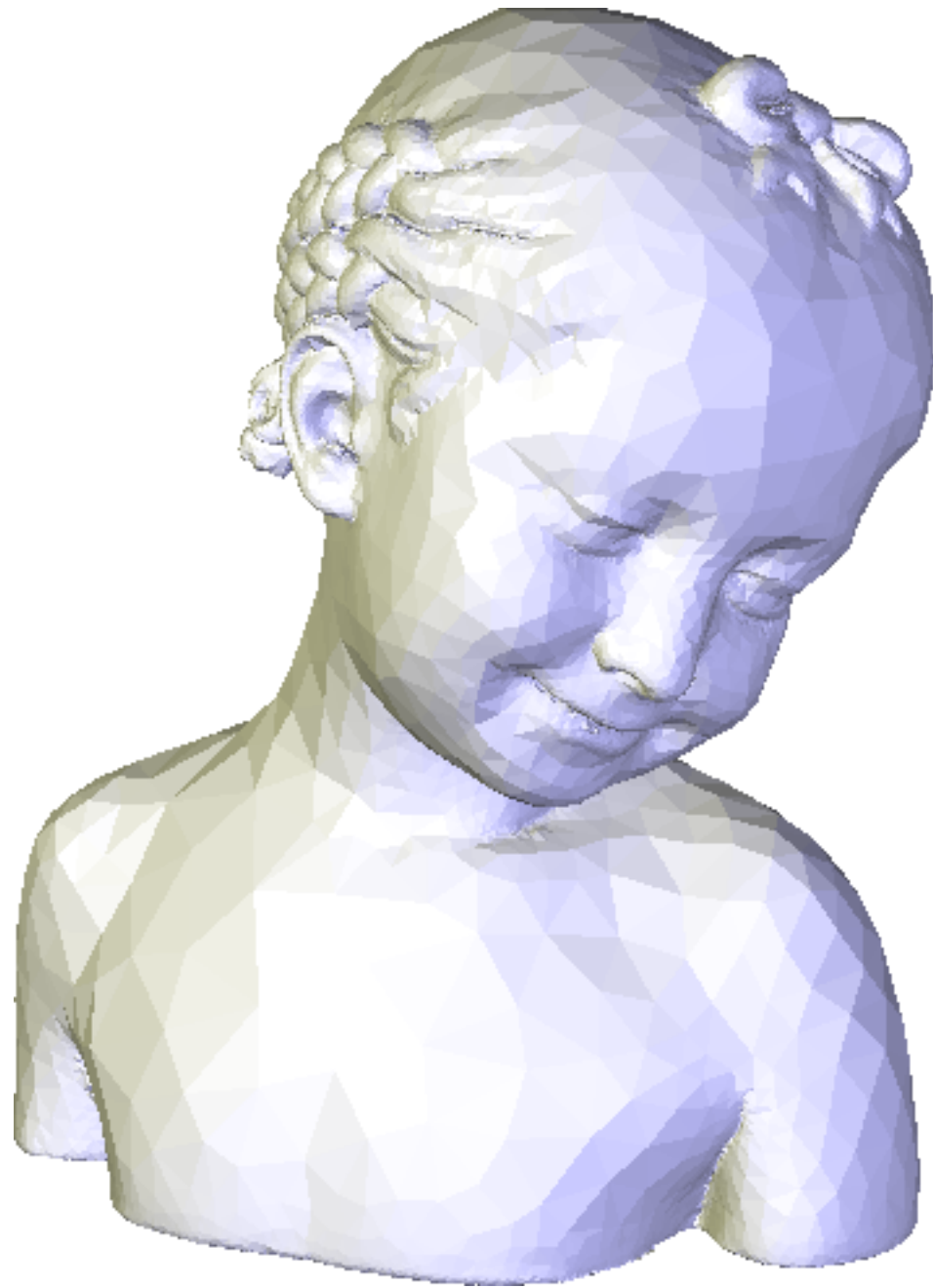
Snapshots of selective reconstructions



Symposium on Point-Based Graphics 2006

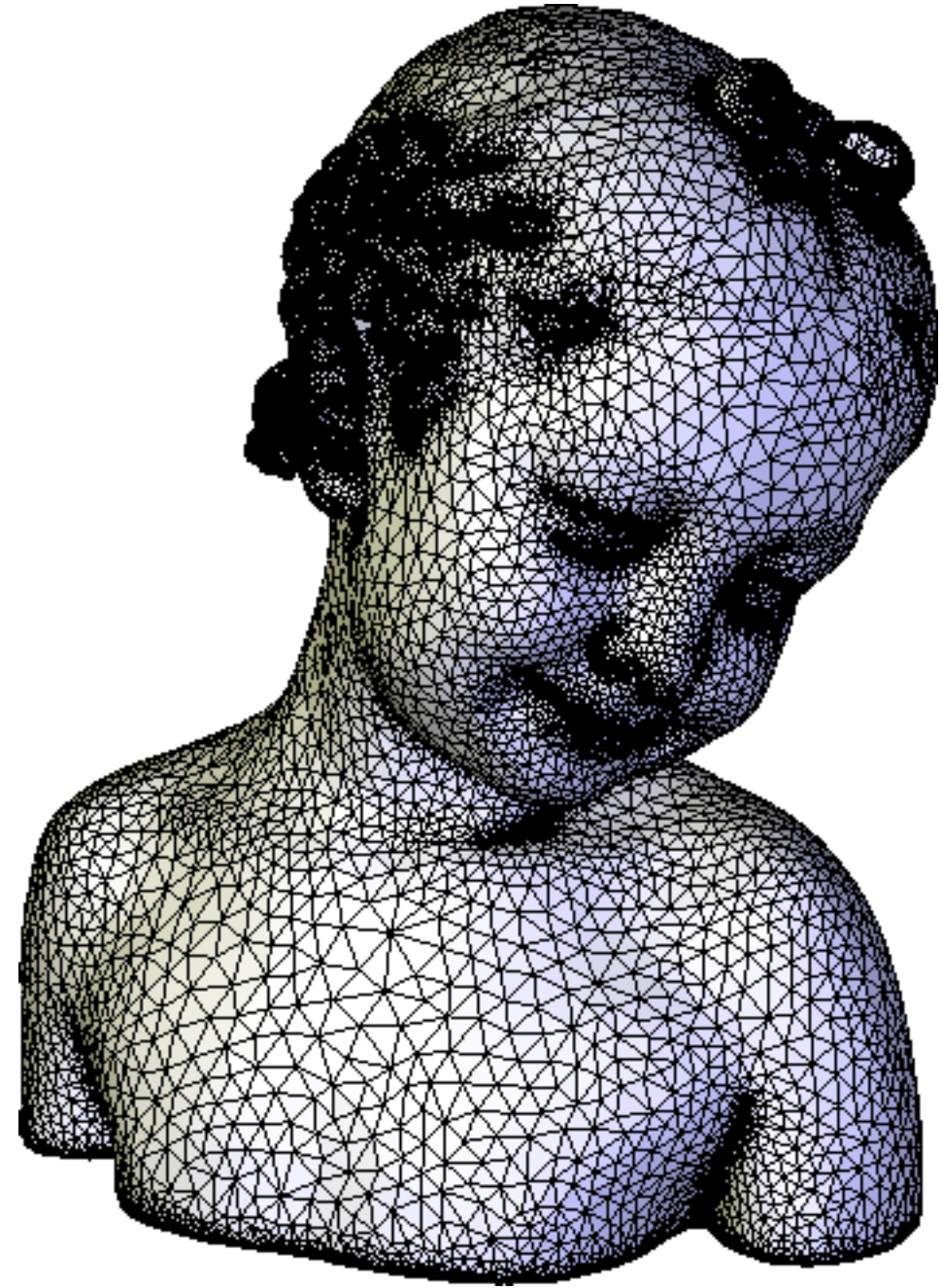
# BIMBA

(1.9M points → 31k points)



# BIMBA

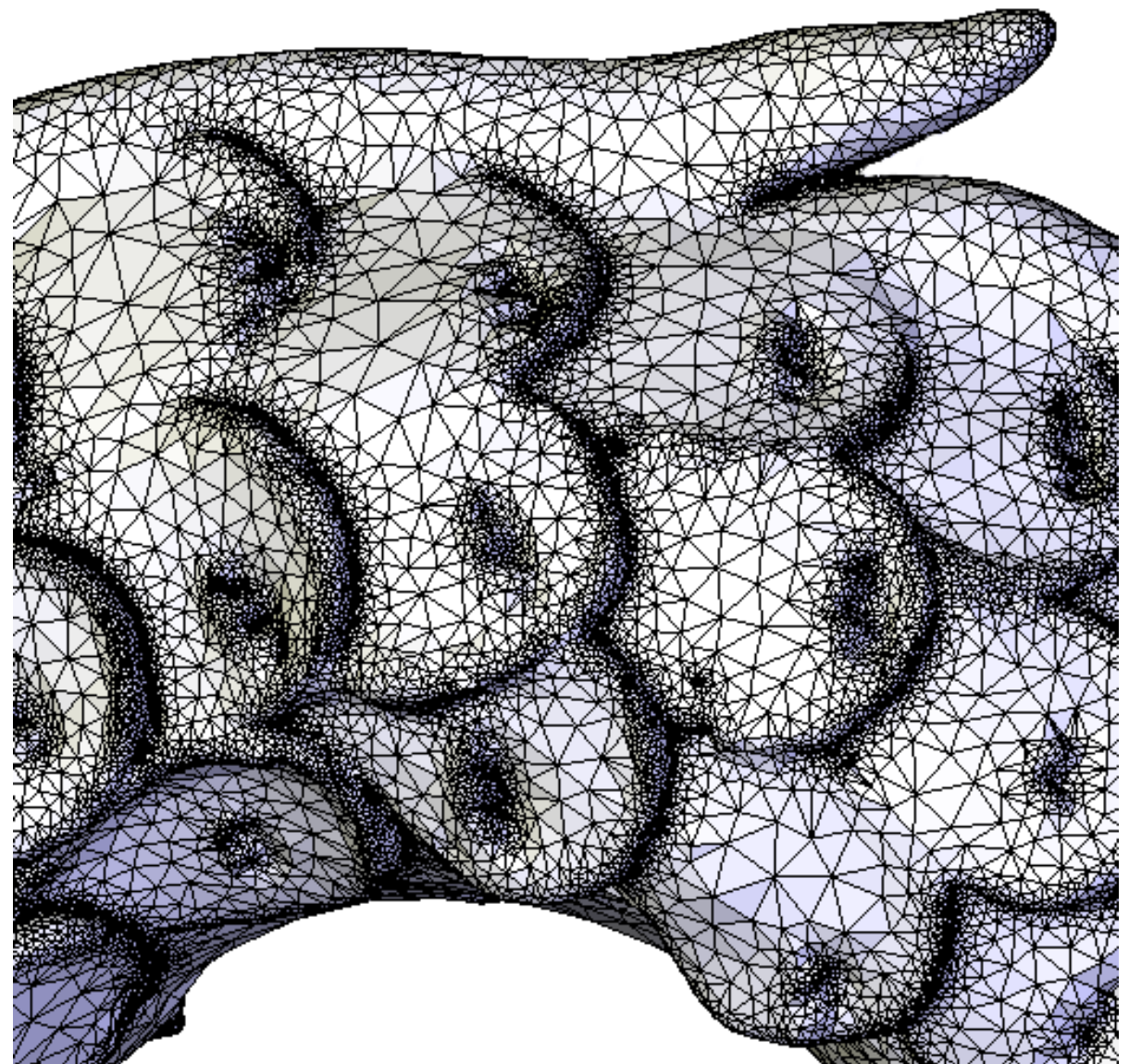
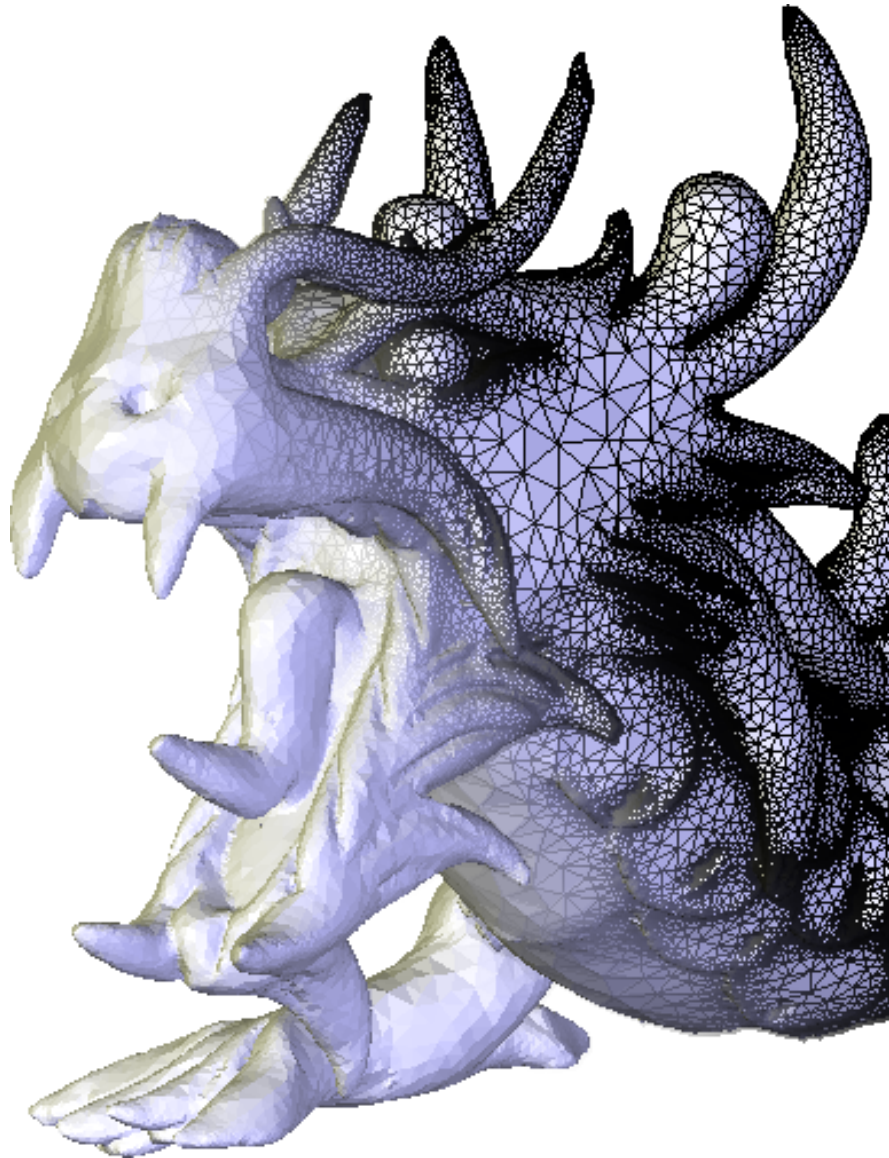
(1.9M points→58k points)



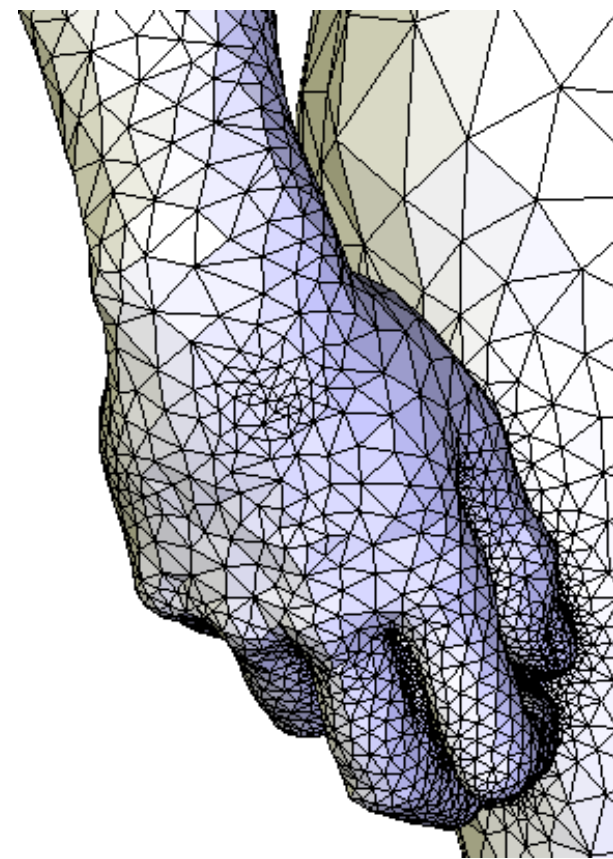
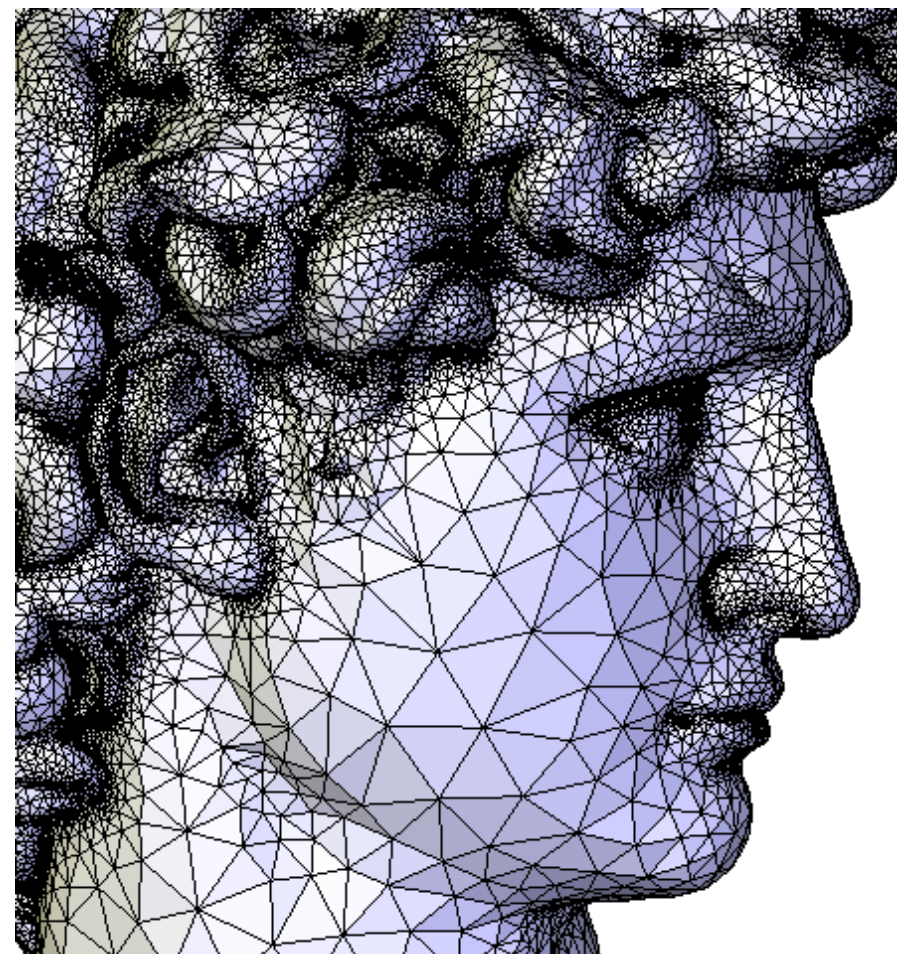


# ASIAN DRAGON

(3.6M points → 185k points)





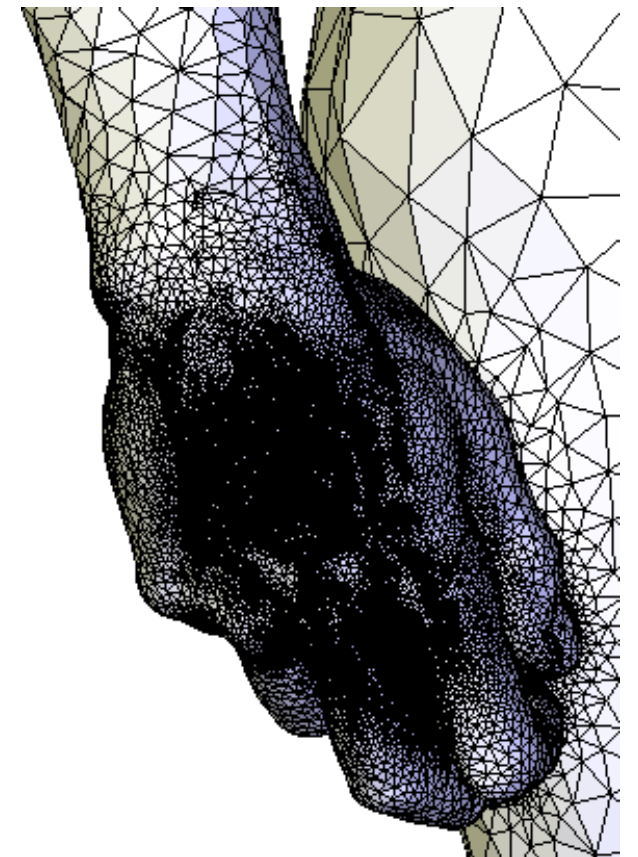
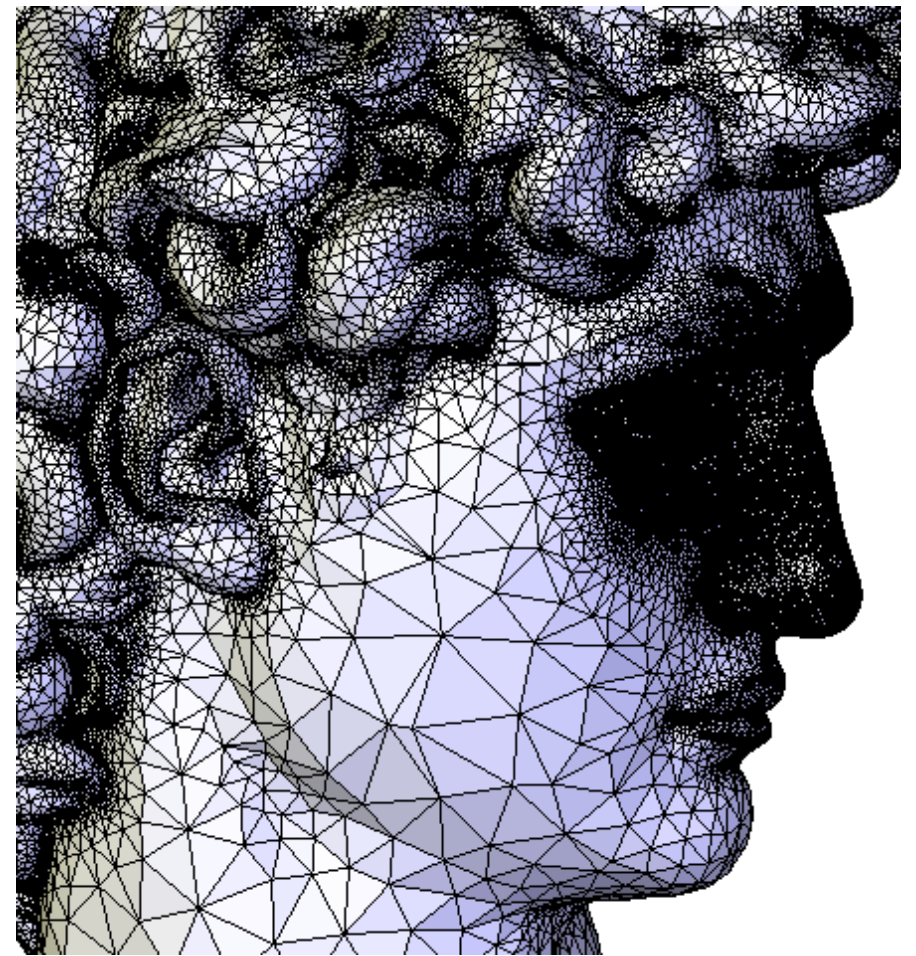


# DAVID

(3.6M points → 175k points)

*initial reconstruction*



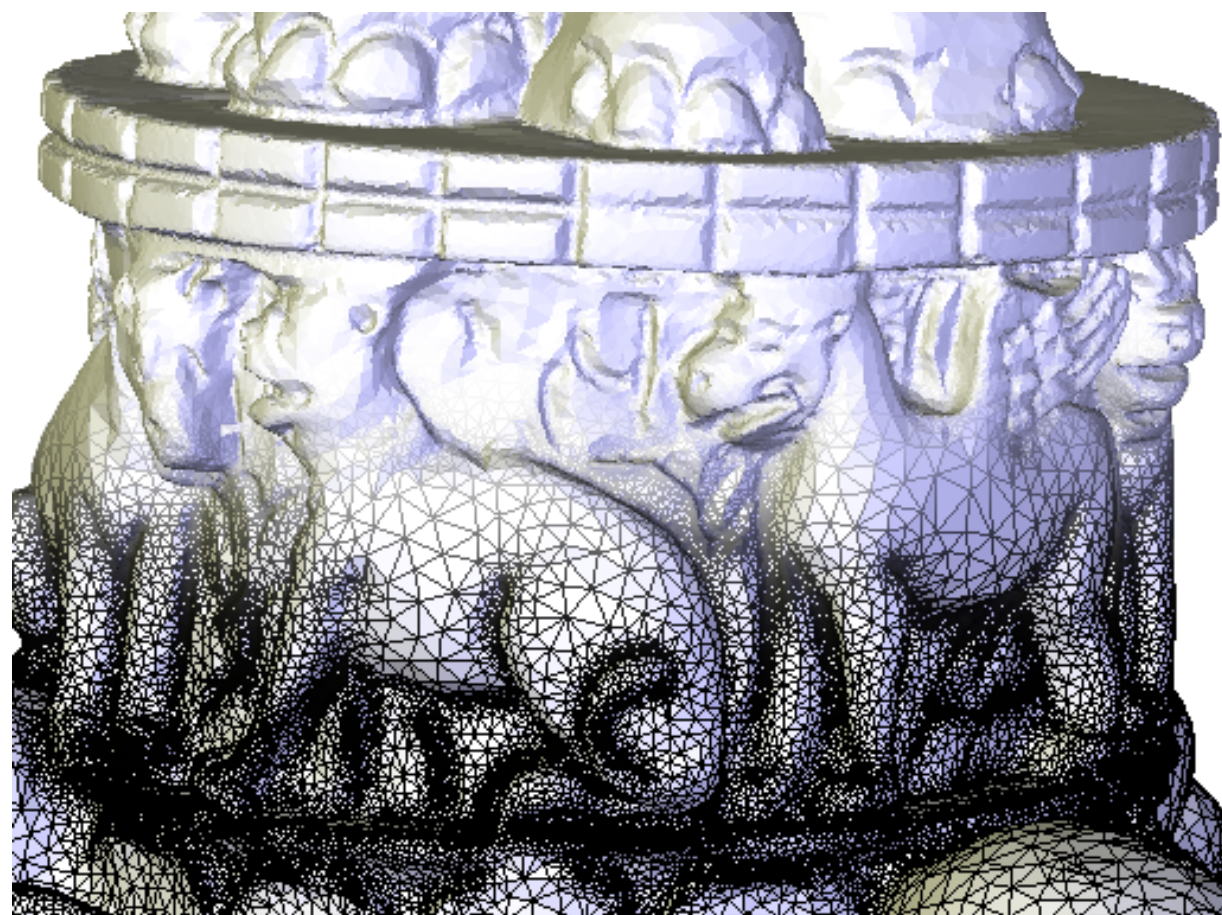
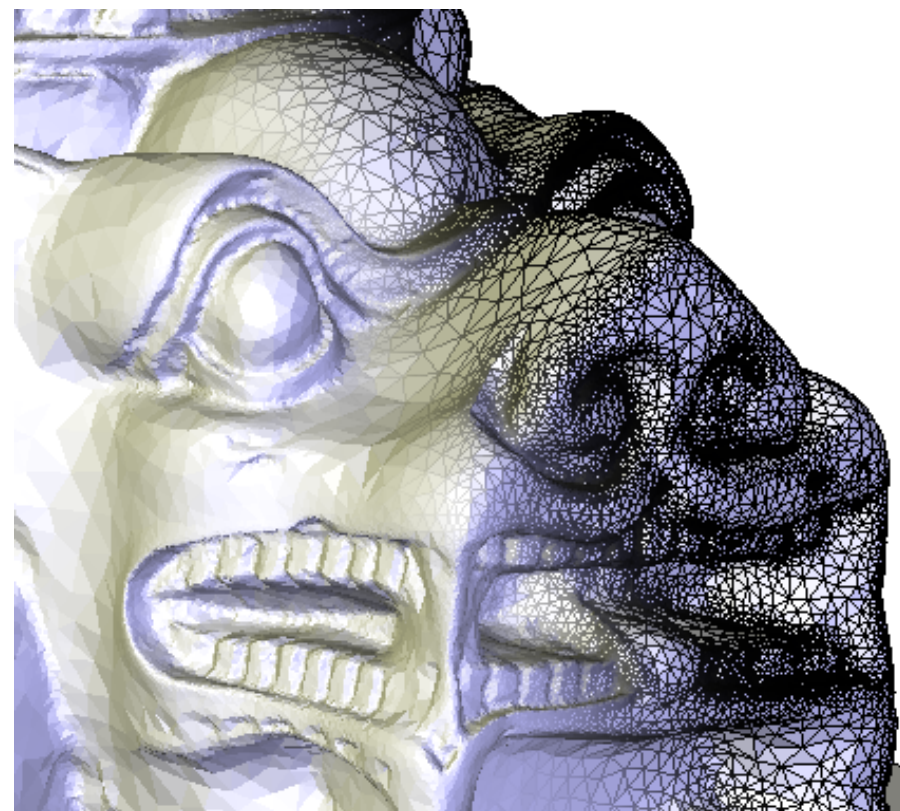
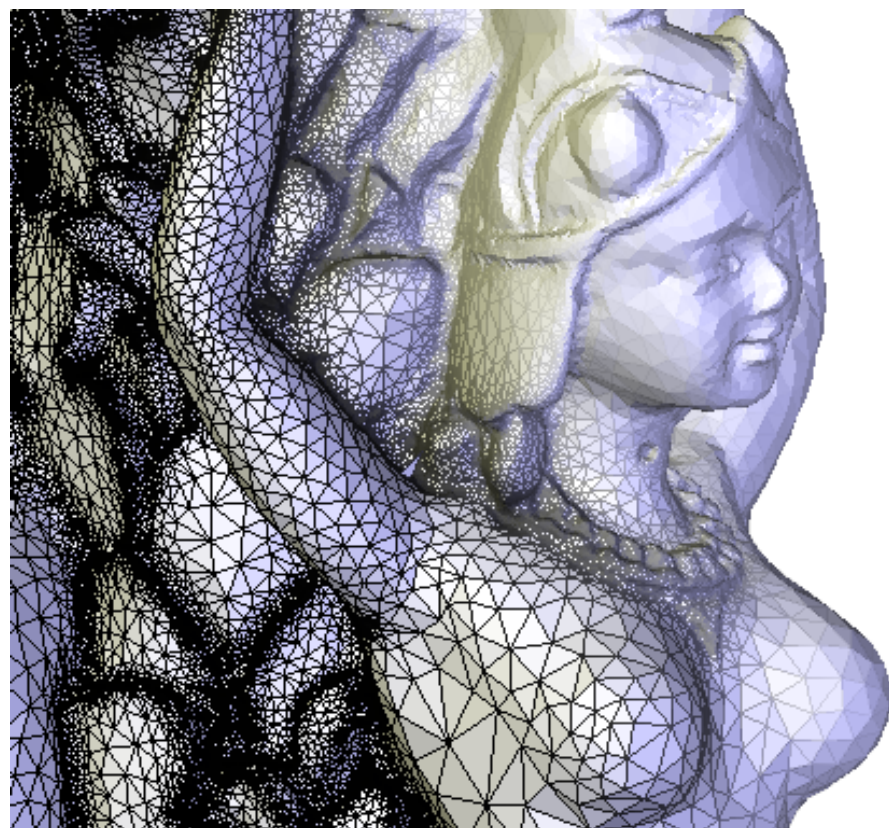
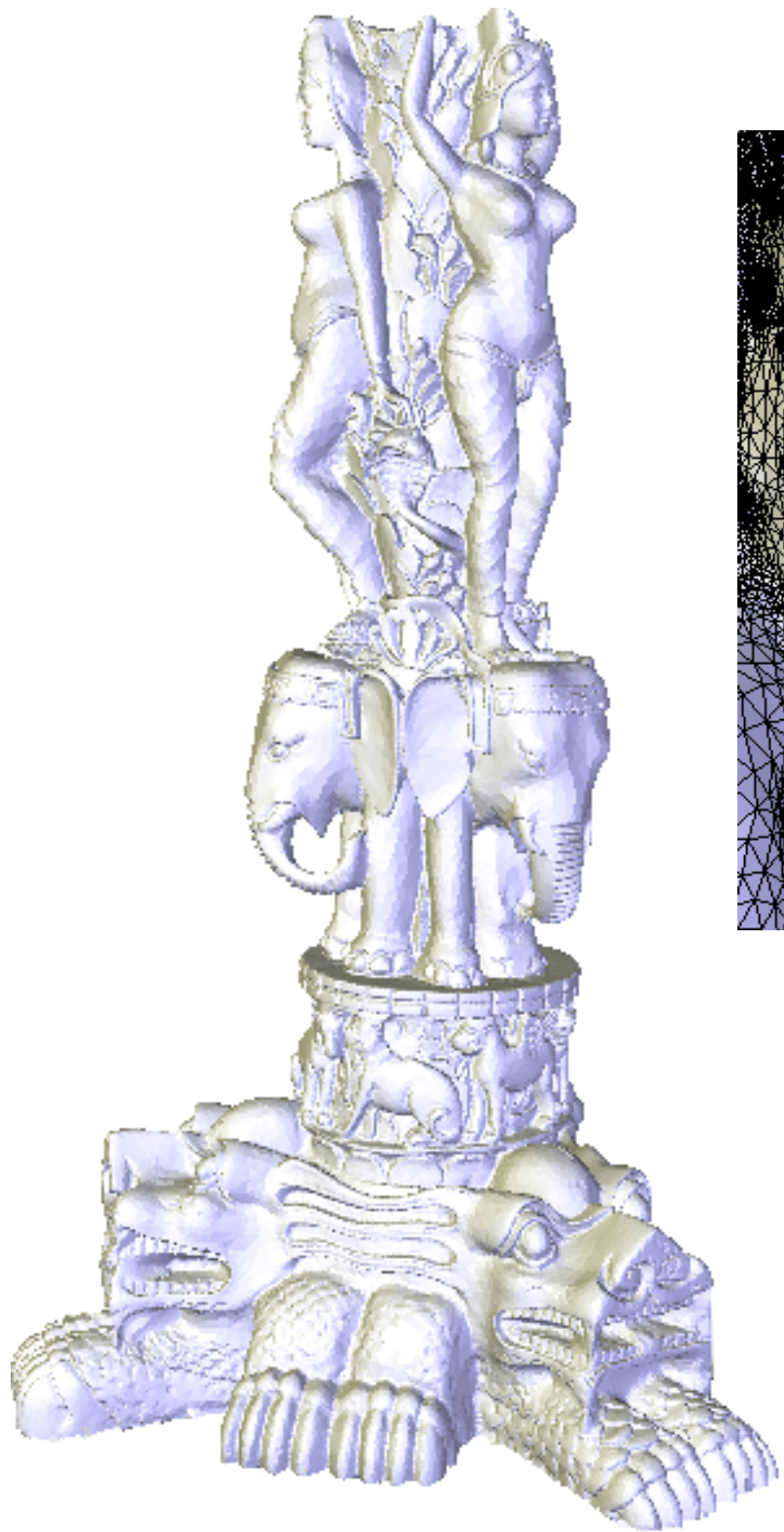


# DAVID

(3.6M points → 175k points)

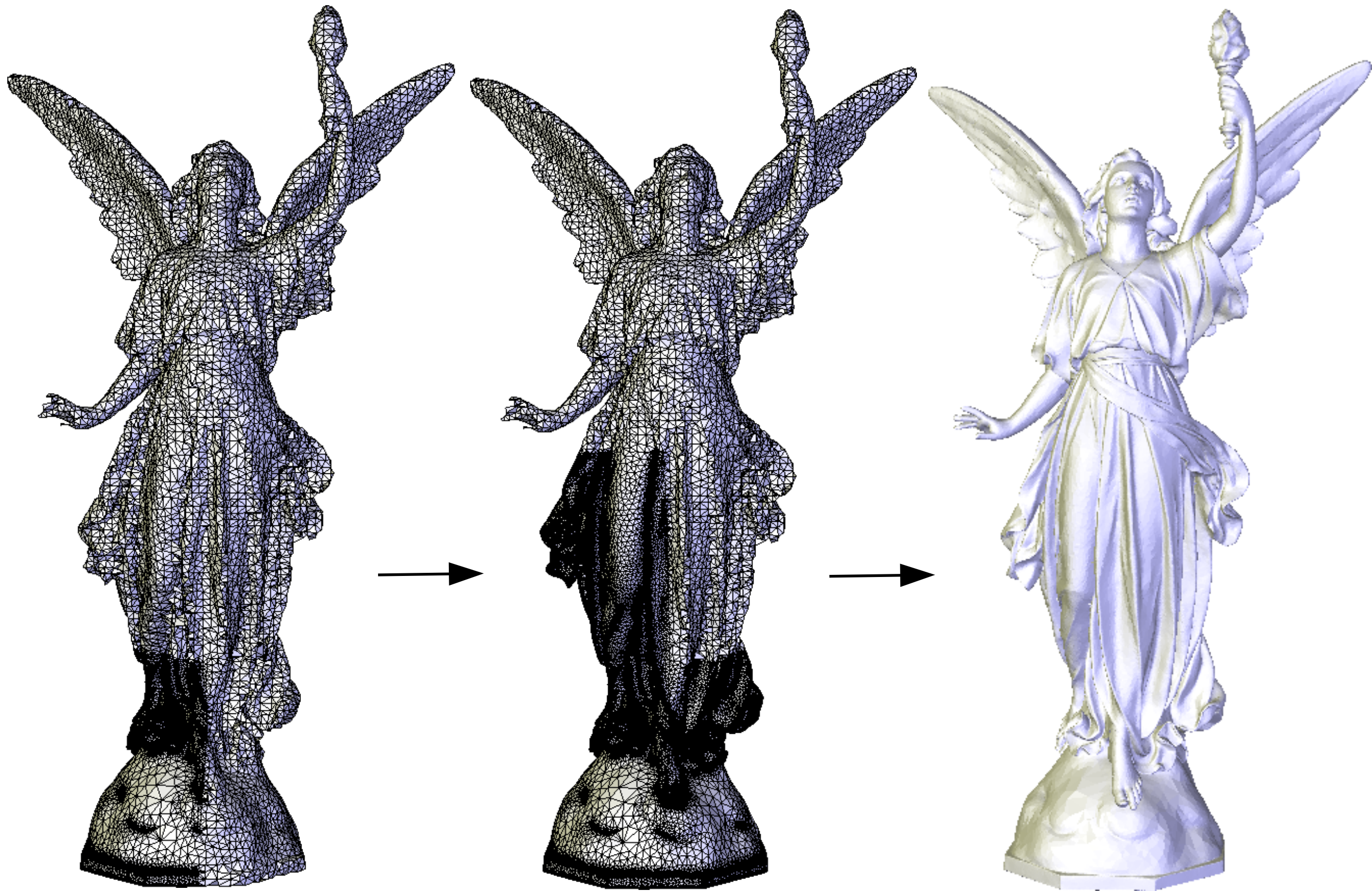
*local refinement*





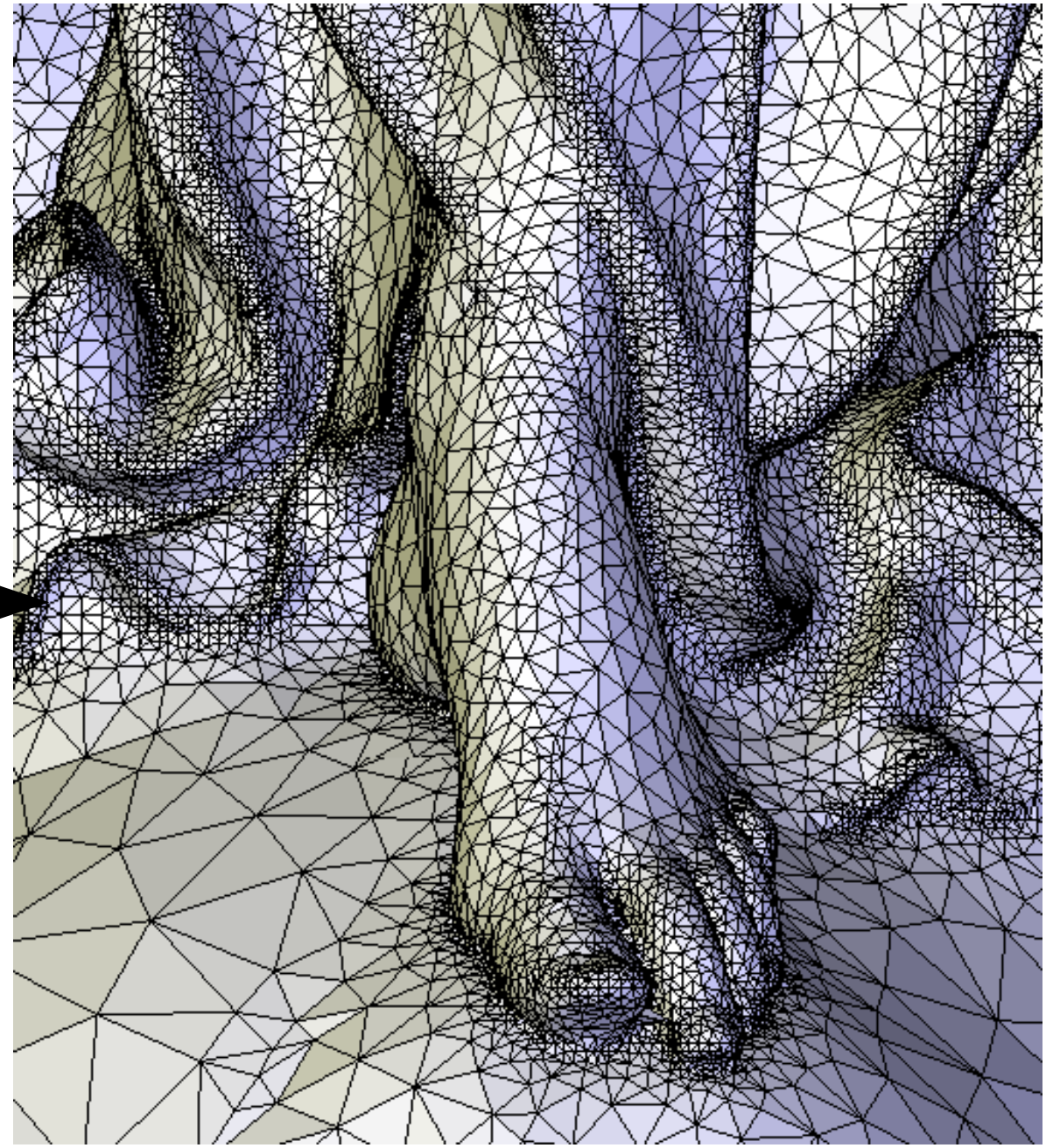
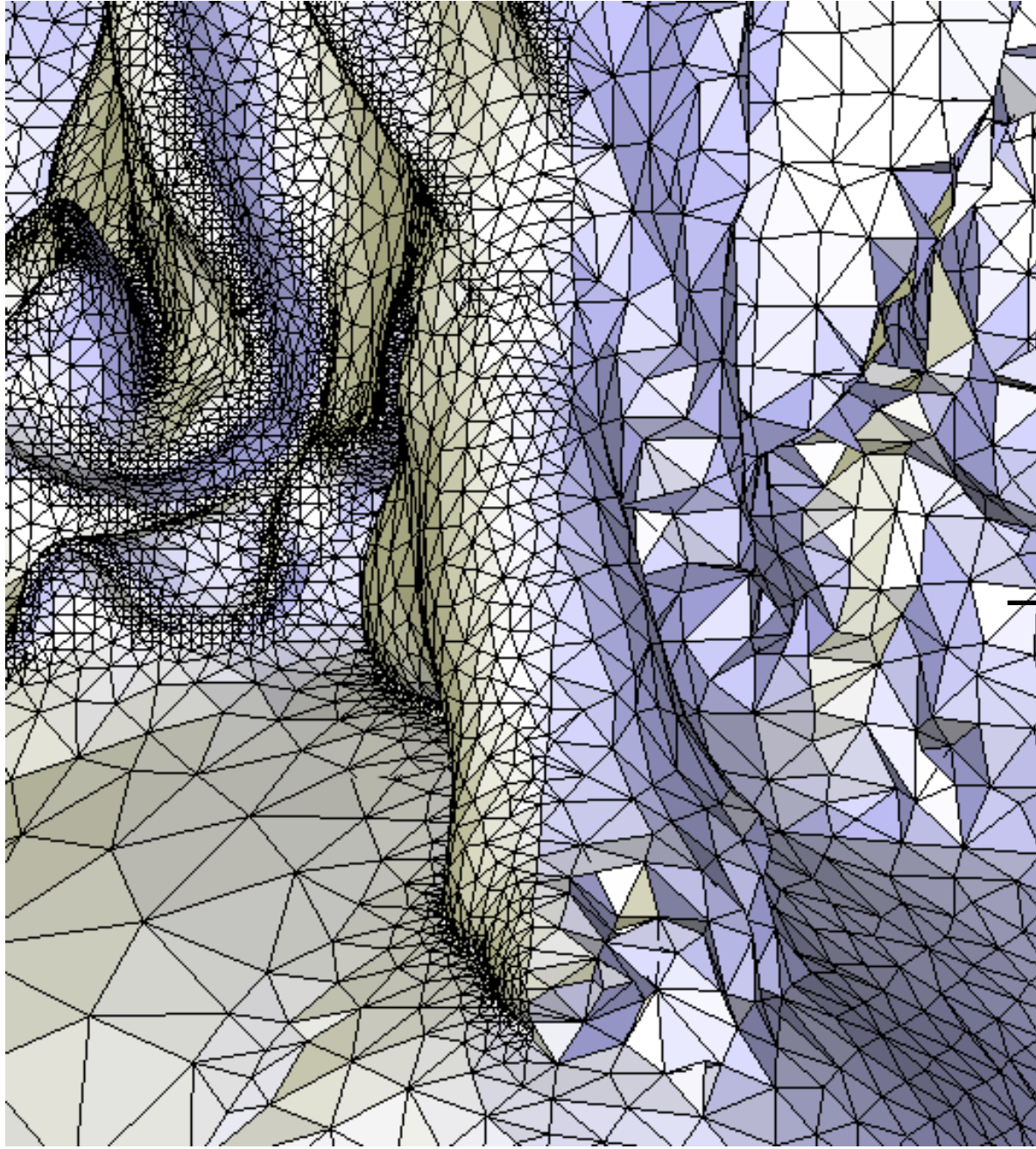
THAI STATUE  
(5M points → 572k points)





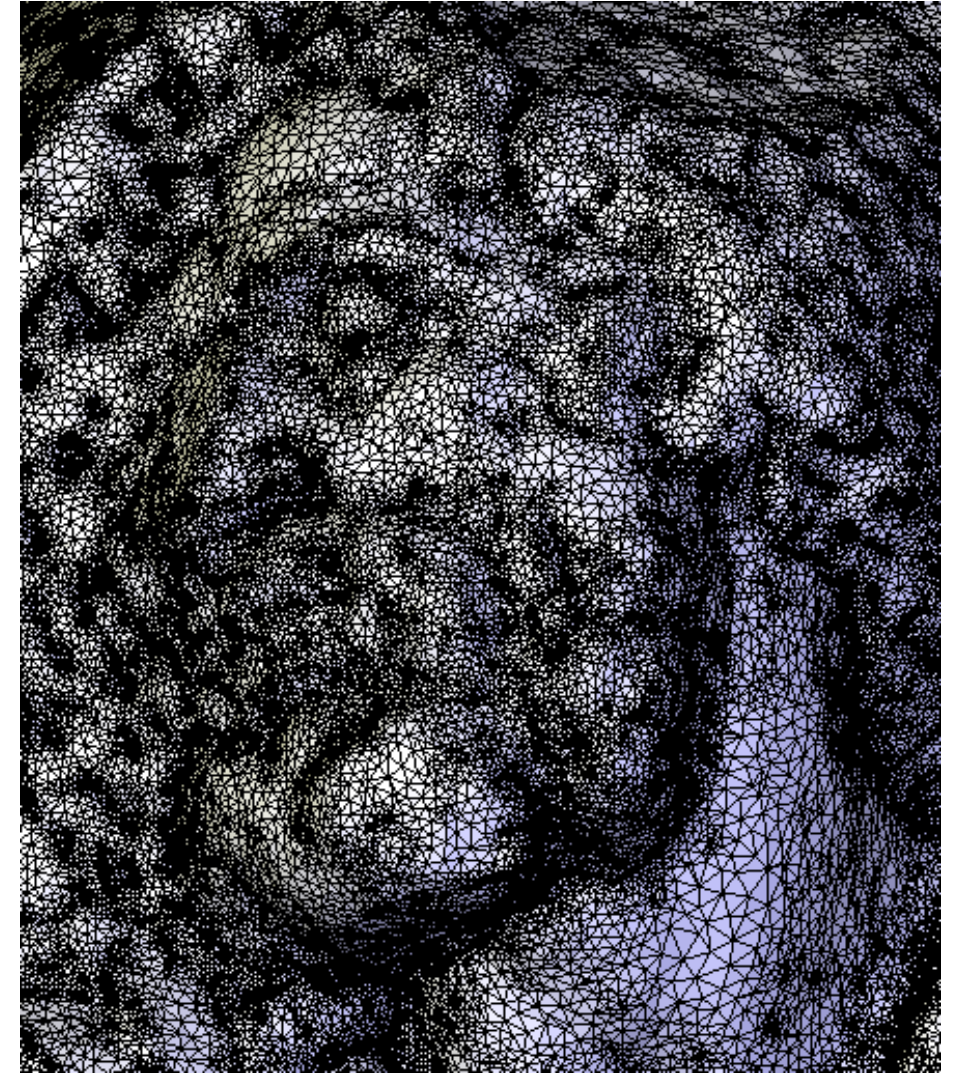
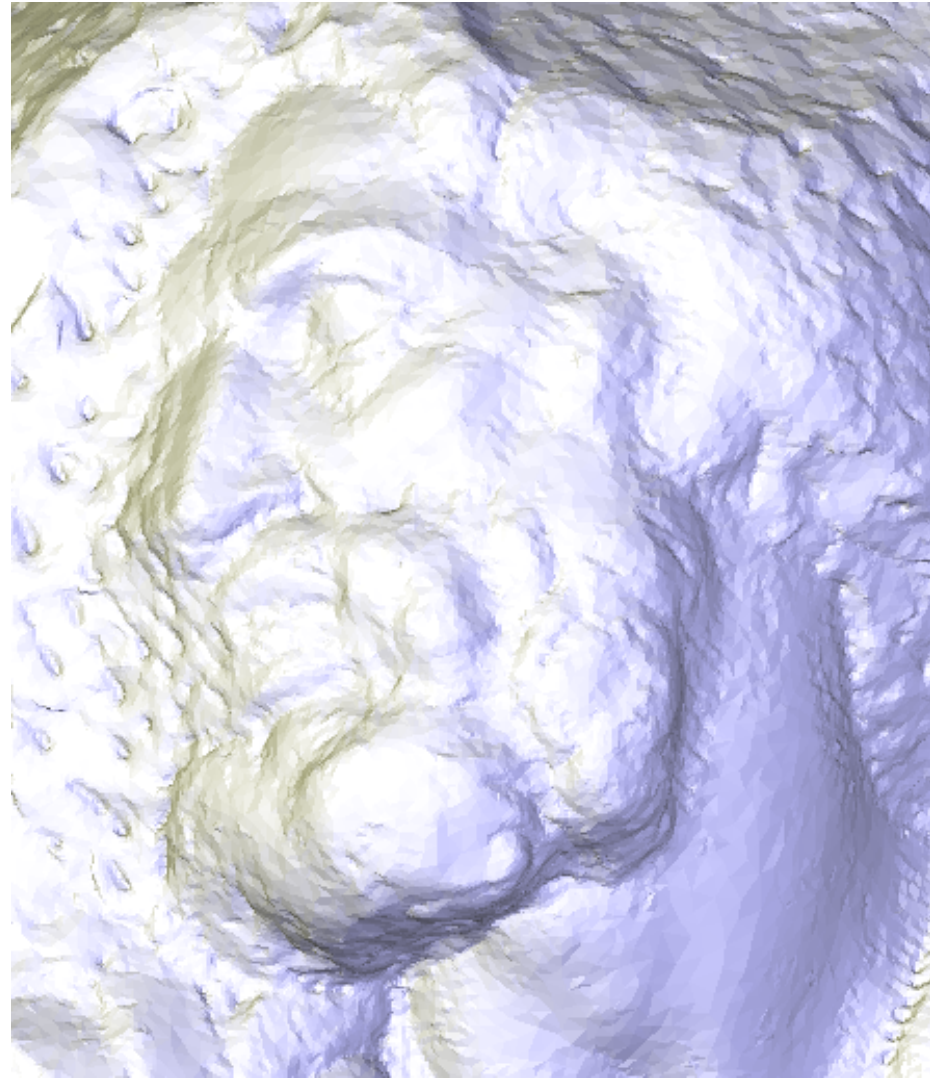
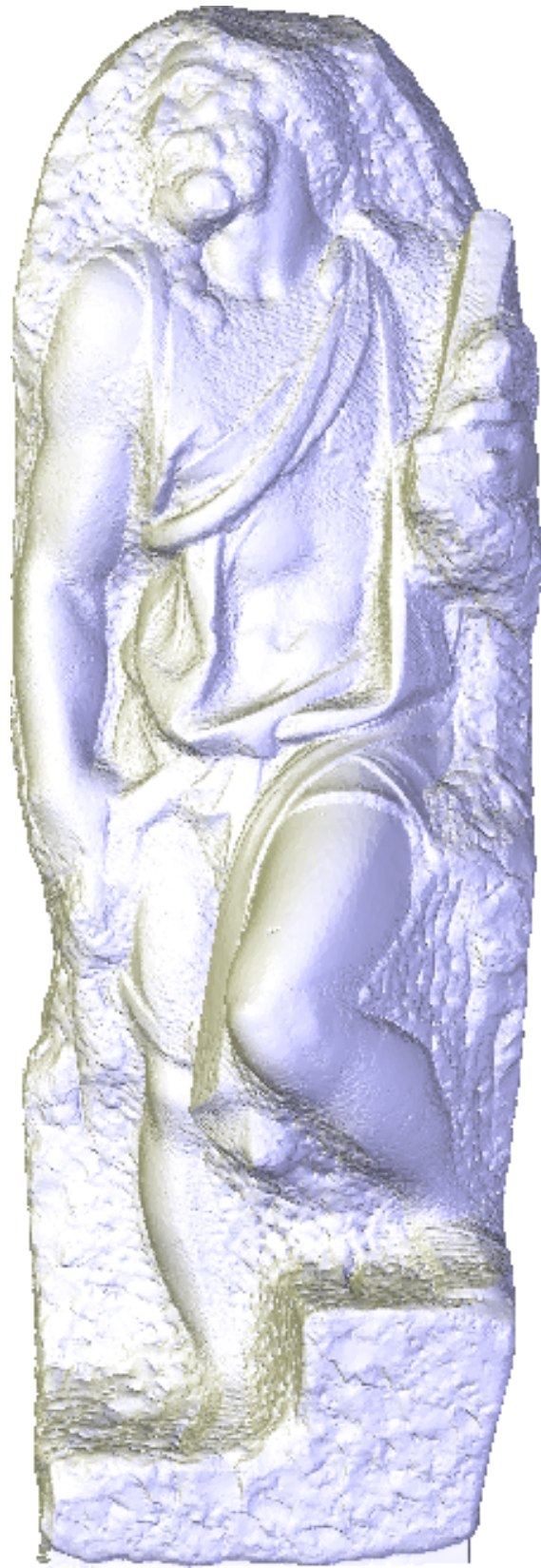
LUCY (14M points  $\rightarrow$  551k points) *out-of-core reconstruction*





LUCY (14M points  $\rightarrow$  551k points) *out-of-core reconstruction*





ST. MATTHEW  
(26M points → 1.2M points)  
*out-of-core reconstruction*