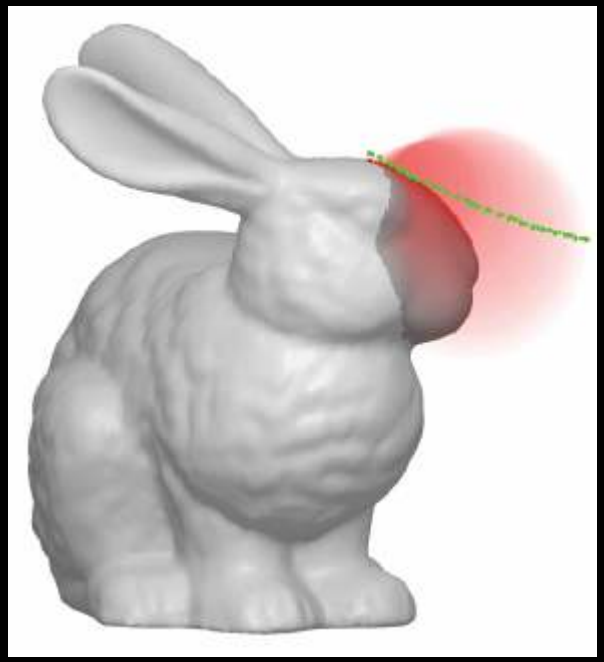
SilSketch: Automated Sketch-Based Editing of Surface Meshes

Johannes Zimmermann
Andrew Nealen
Marc Alexa

Presented by Michael Whiteley

Terms

- Model
- Silhouette
- Oversketch
- Handle
- ROI



“Typical” Process for silhouette based editing

- Handle
- ROI
- Feature

Silhouette

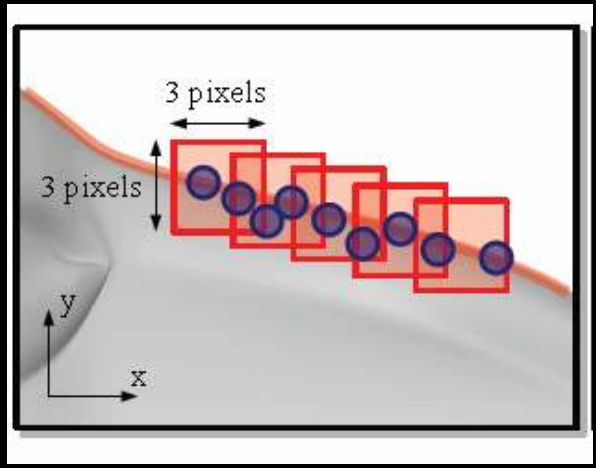
- Math
  - sil(p) := D2[depth(p)] > theta_p
  - cont(a, b) := ||depth(a) – depth(b) || < theta_n
- Edge Removal < 2 similar neighbors

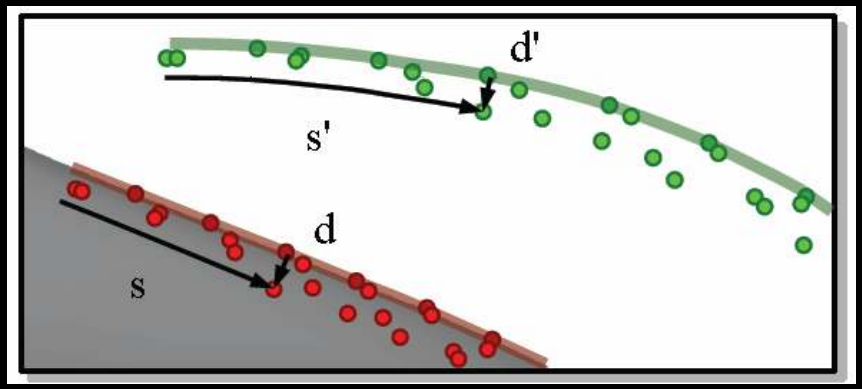
Handle Estimation

- simplify line
- cull search
- calculate turning angles
- Match line

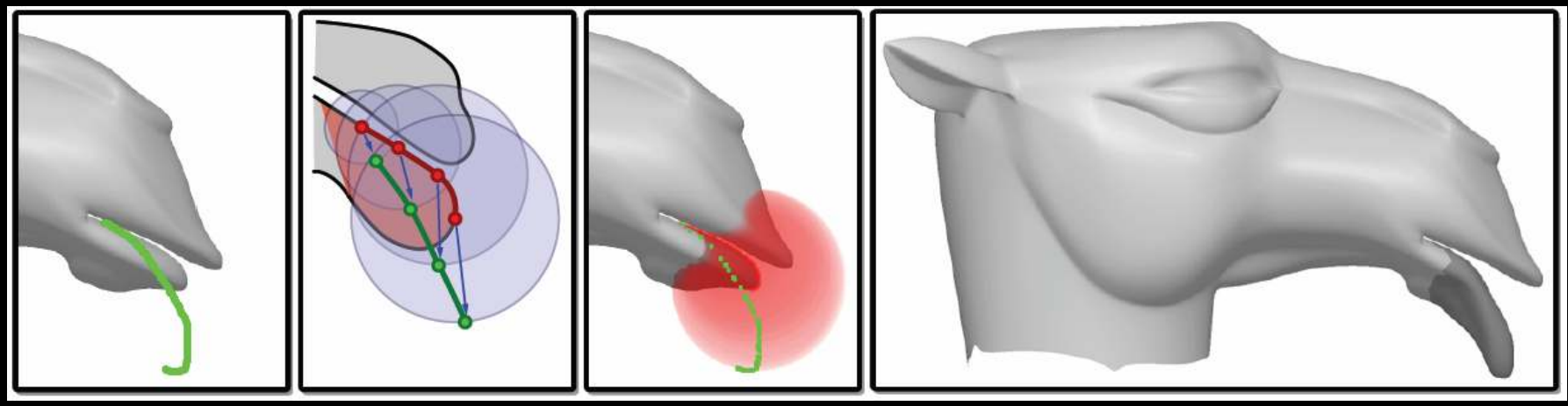
Handle vertex selection

- volumes
- point matching



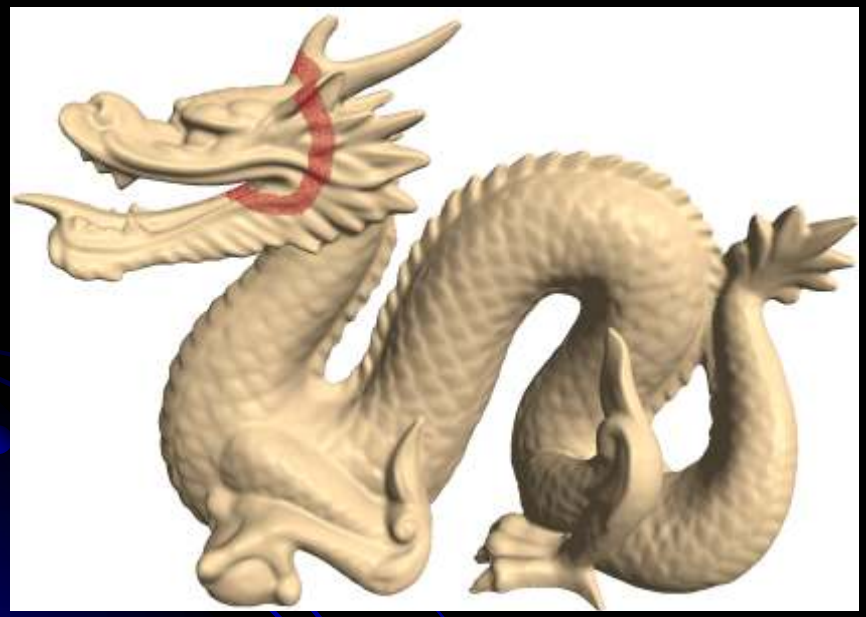


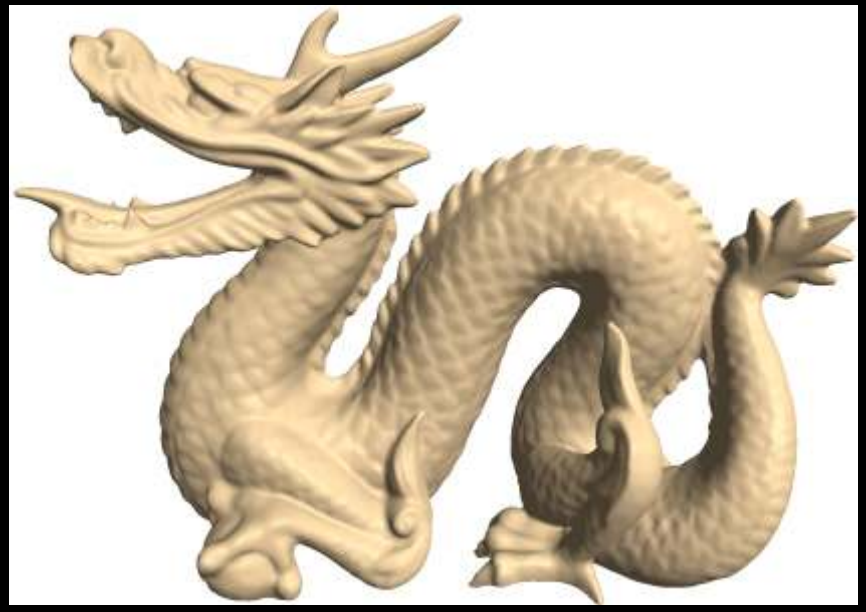
ROI Estimation



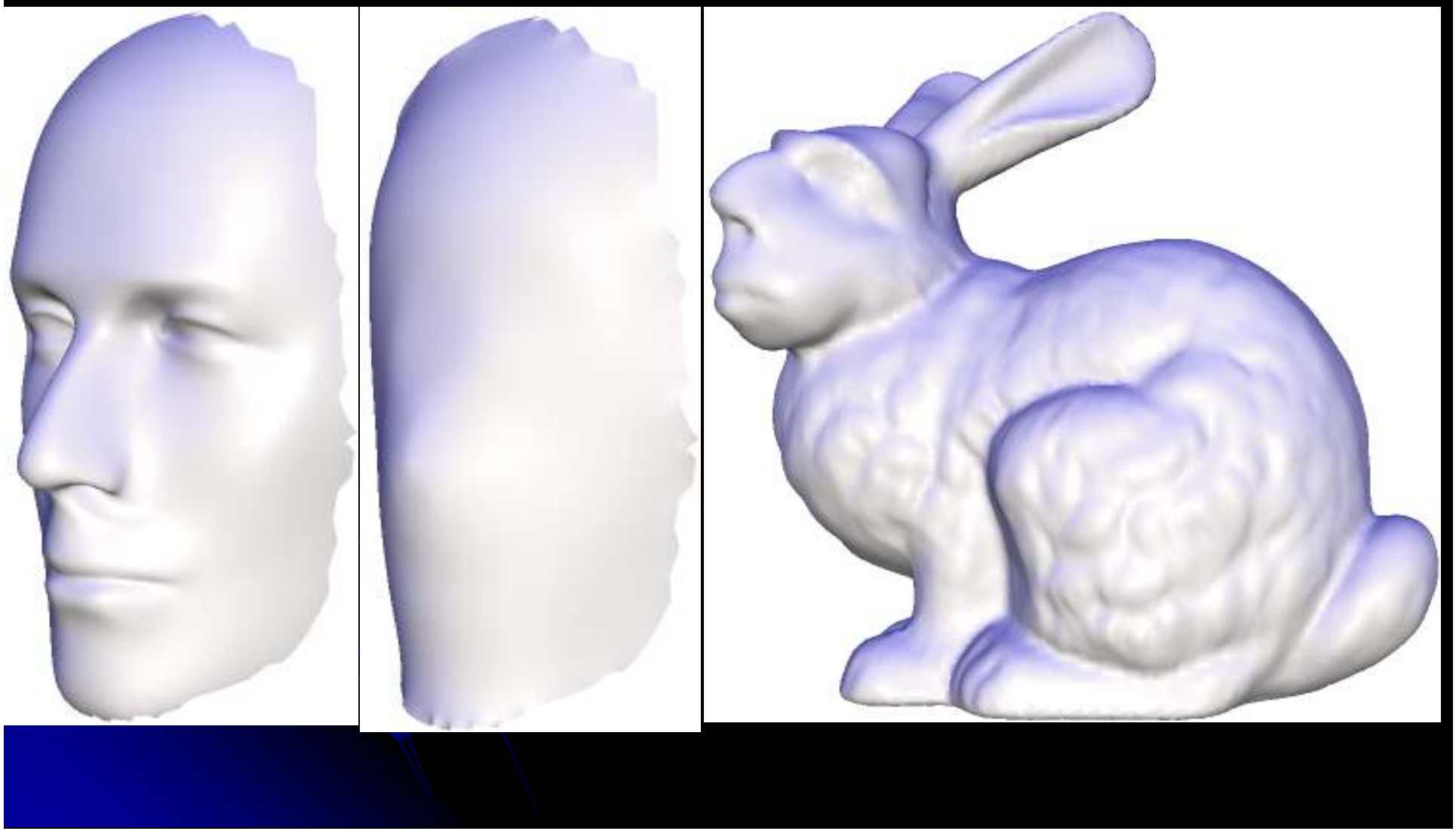
- distance -> radius
- Volume union

LSE



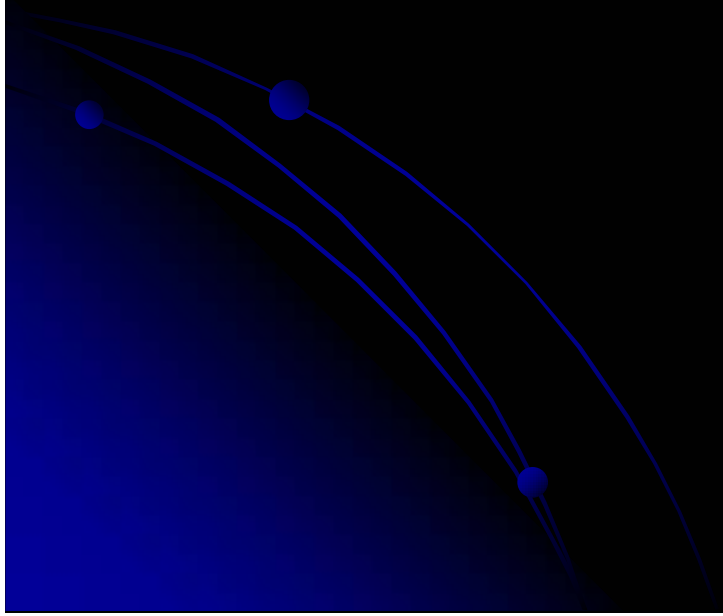


LSE Coolness



Quick Recap and Results

Video can be found at http://www.cg.tu-berlin.de/sbm.html



Issues