Geometry Processing/Modeling

- Segmentation Tools (Seg3D)
- Surface Filtering: Antialiasing, Tightening
- Volumes
- Label Maps
- Correct Topology
- Regularize Geometry
- Meshing: Adaptive, Geometrically Regular
- Simulation
- Body-Fitted 3D Meshes
- Shape Analysis
- Hypothesis Testing
IGP Core Progress

Image processing
  Seg3D – hooks into ITK
  Various surface filtering
    Topology correction, tightening
Shape analysis pipeline (IPMI 2007)
ITK Implementation
Meshing
  Adaptive, multimaterial meshing (TVCG 2007, IEEE Vis 2007)
IGP Research Plans

Continued development integration of volume processing
Integration into ITK/Seg3D/SCIRun
Continued development of meshing capabilities
Refinement of techniques
Software development
Shape analysis development and application
Specific studies, comparisons, pipeline
Deployment