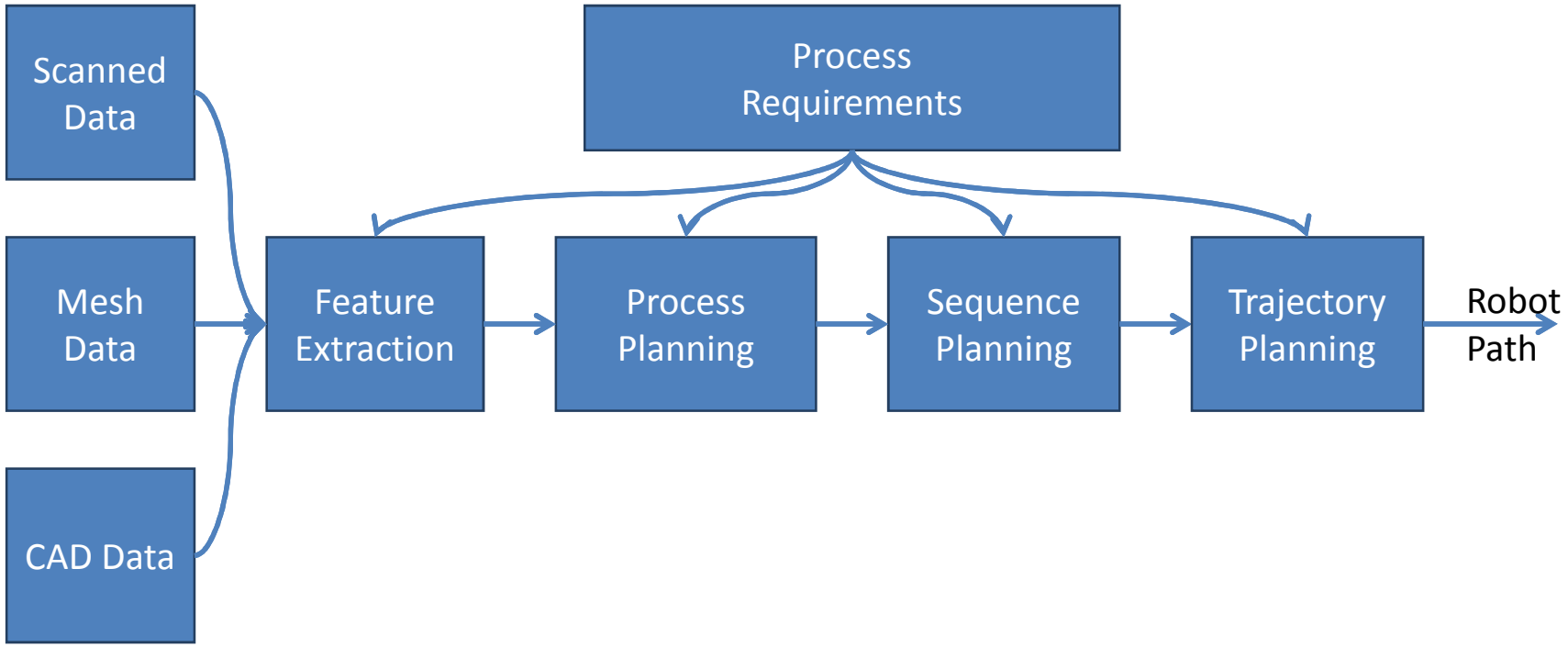
Robotic Path Planning for Geometry-Constrained Process

Levi Armstrong, SwRI

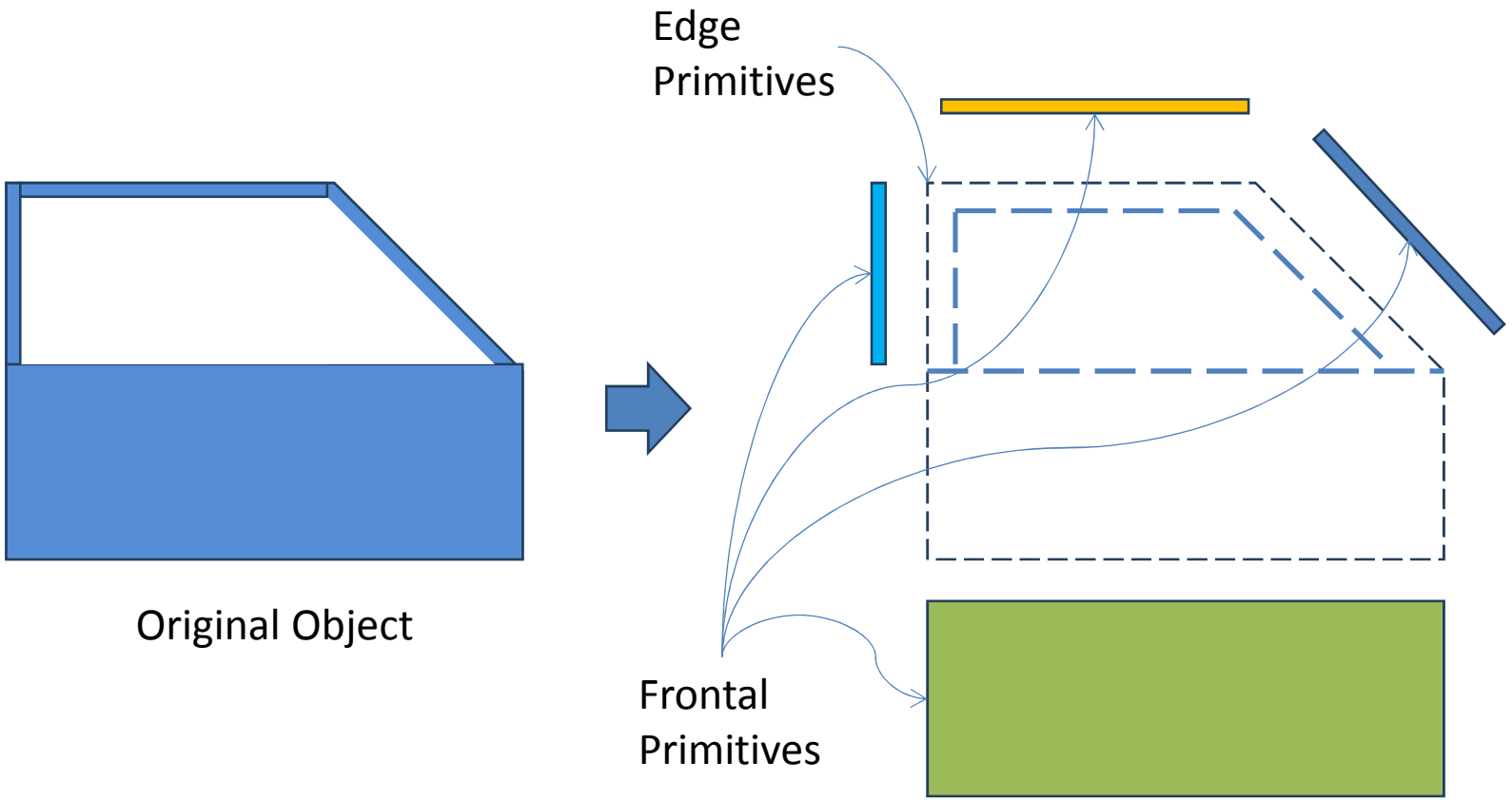
21 September, 2016

Noether Package

- Develop a process path planning framework.



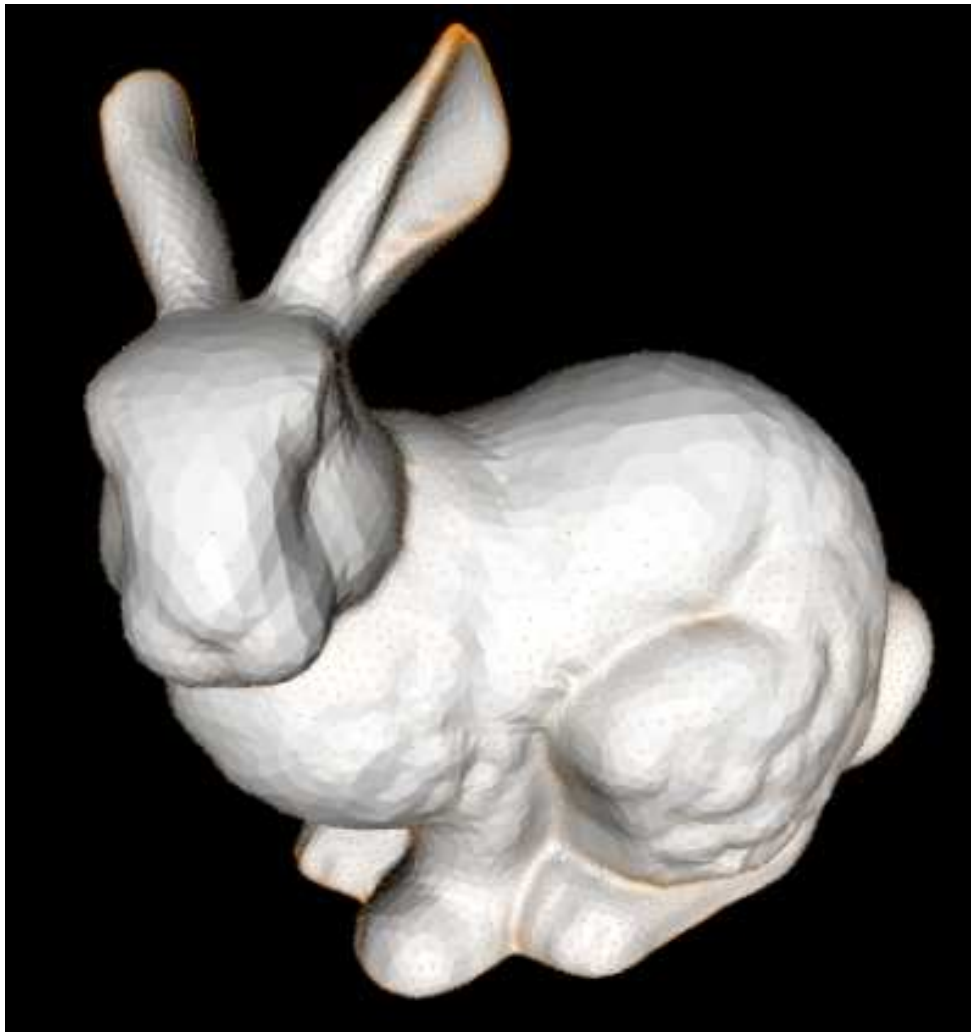
Why?

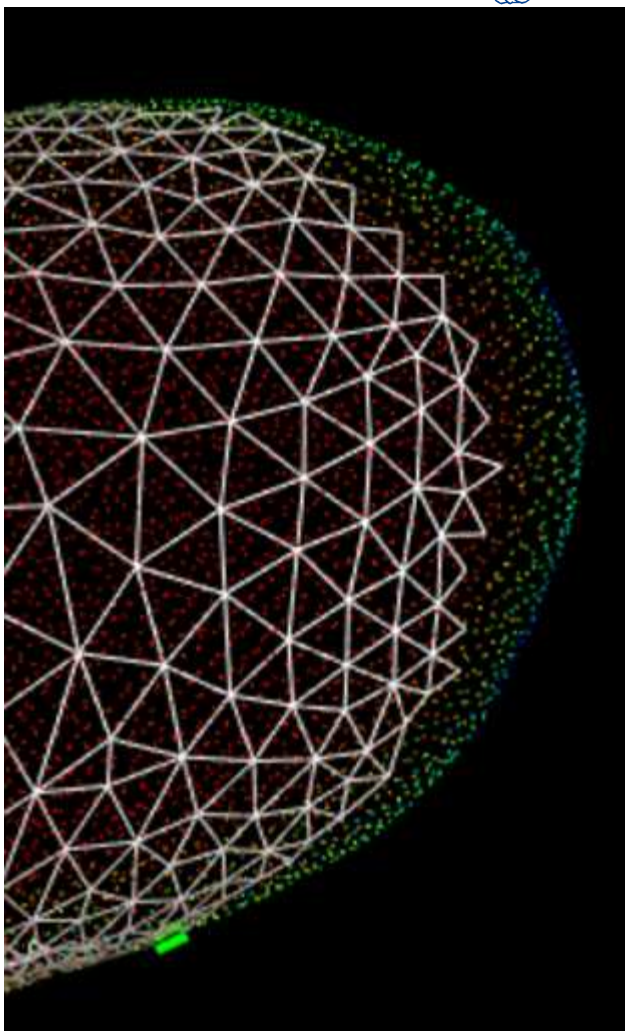


Current Capabilities

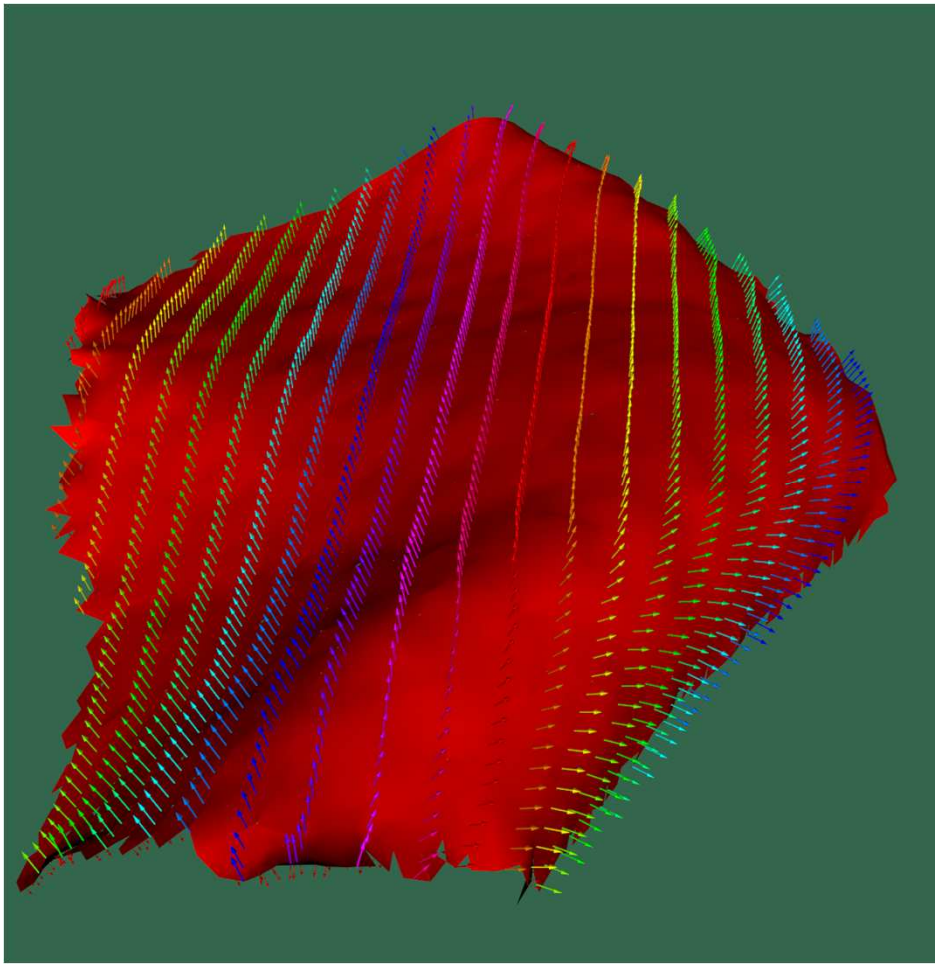
- Framework (Plumbing)
  - Plug-in Based
- Feature Extraction
  - PCL Cluster Extraction.
- Process Planning
  - Raster path generation given a polygon mesh.
- Meshing
  - Advancing Front Surface Reconstruction
- Sequence Planner
  - Closest
- Trajectory Planning
  - Descartes

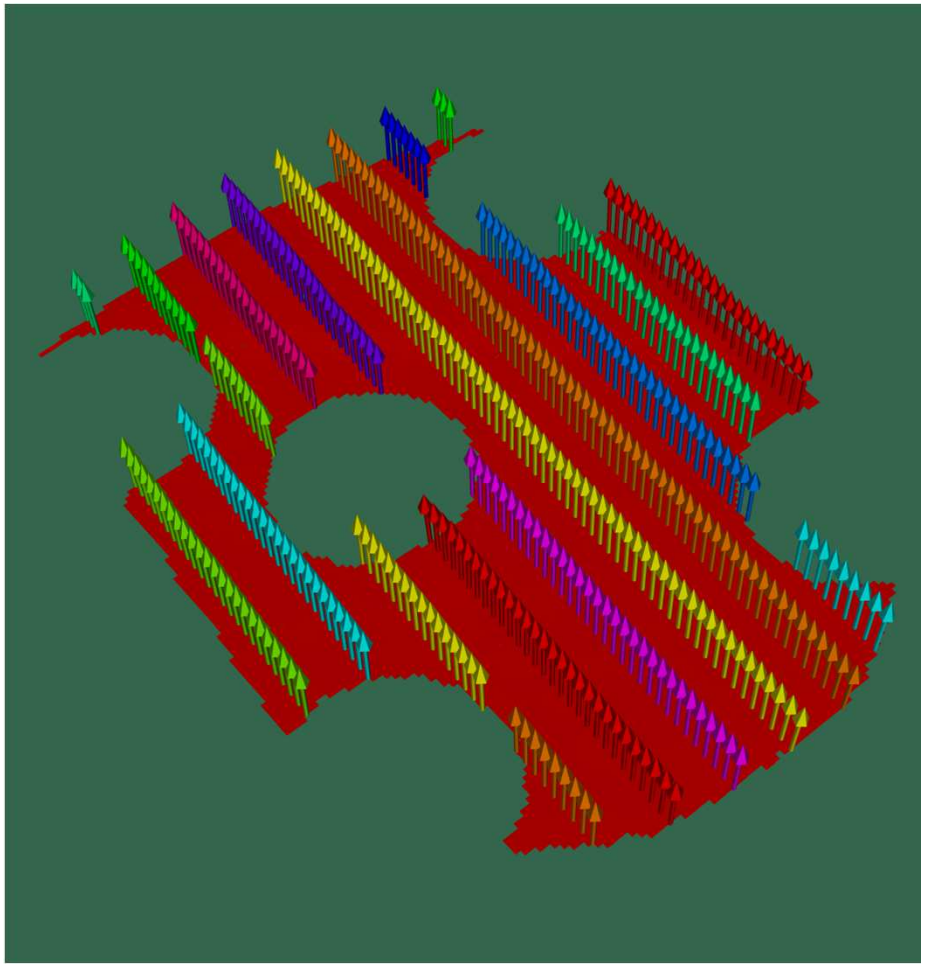
Advancing Front Mesher



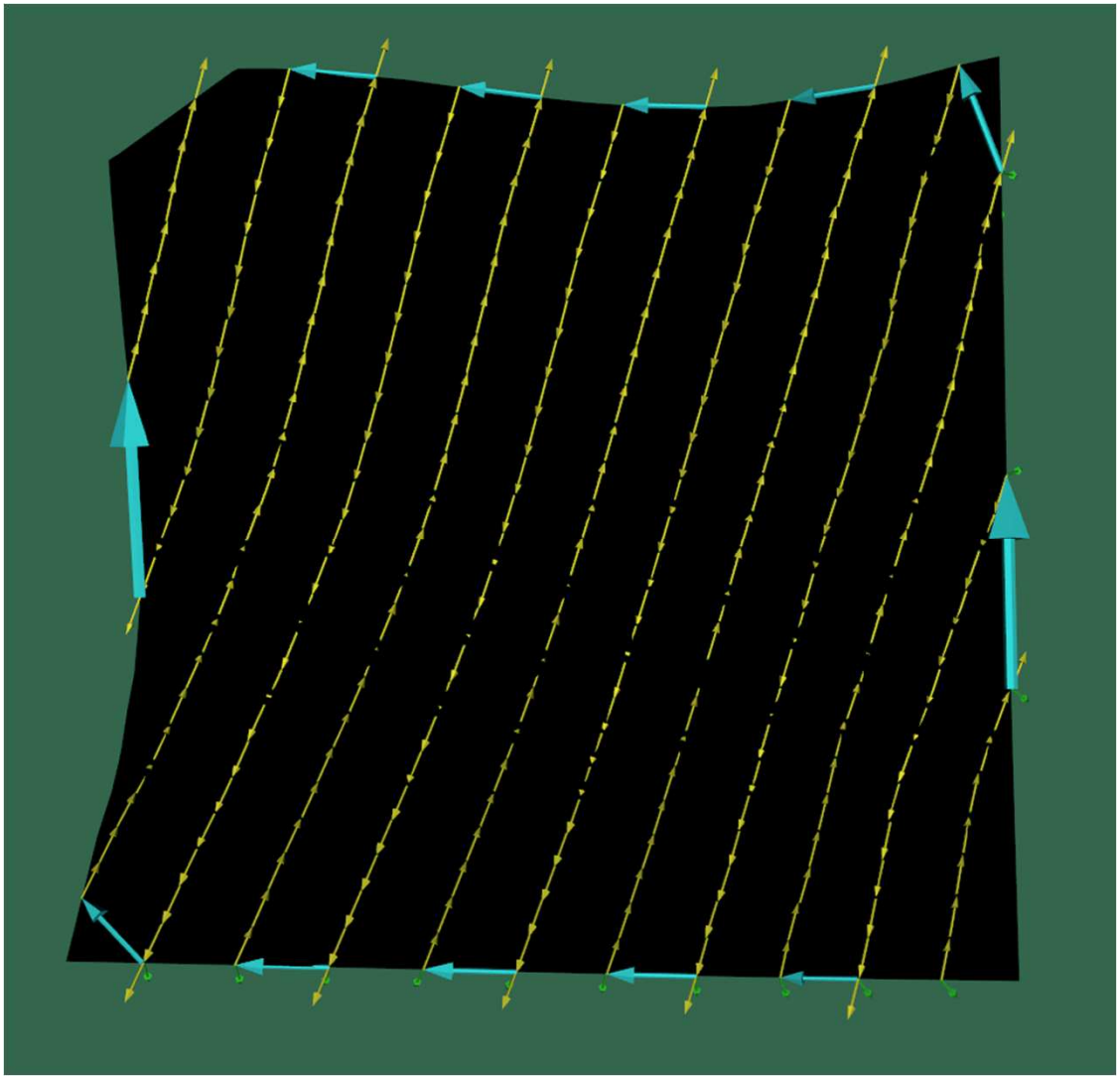


Process Planner





Sequence Planner



Location

- Github:
  - https://github.com/ros-industrial/noether
- PCL Afront Mesher
  - https://github.com/PointCloudLibrary/pcl/pull/1996

Contact Information

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