

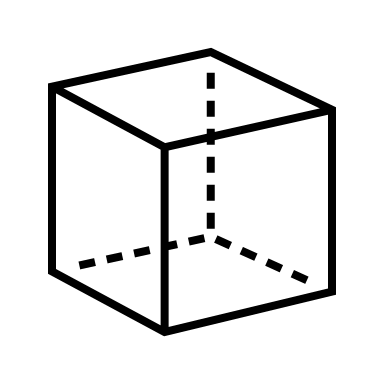
Model Preparation

Workspace Sensing Stage

Path Generation

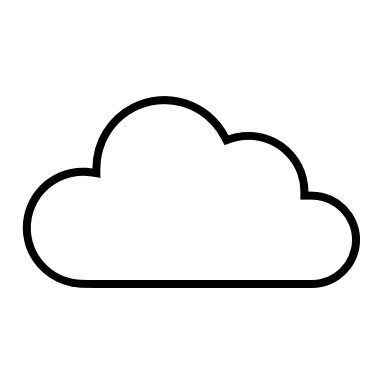
Workpiece CAD

Model Generation



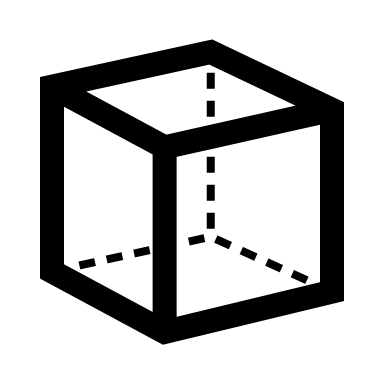
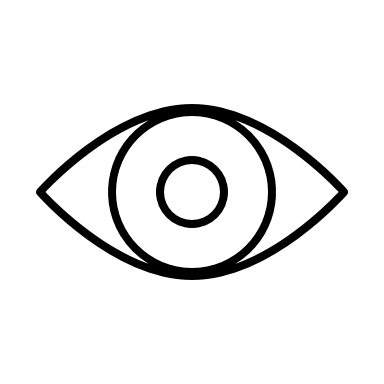
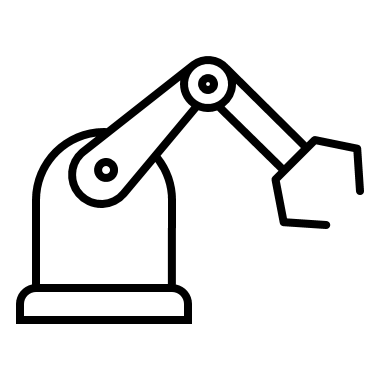
Conversion to

Pointcloud



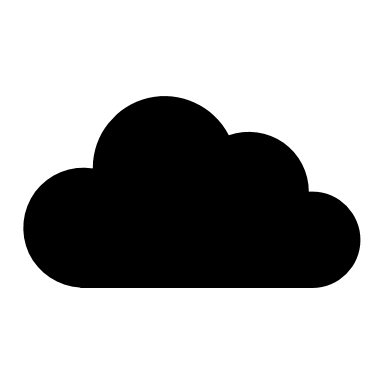
Collection of

2D LiDAR Scans



Conversion to

Pointcloud



Weld Seam

Transformation

Joint Velocity

Profile Generation

Workpiece Localization

Voxel

Filtering

RANSAC

Segmentation

ICP

Registration

