

## Algorithms:

- GUI
  - Spline drawing: evaluate spline at evenly spaced points and create a polyline going through them.
  - Menu code
    - Window based system
    - Containers
  - Mesh Cut: [Sutherland-Hodgman](#)
- AI
  - Spline intersection: create polylines and test lines for intersection
  - Spline self intersection: create polyline and test different line segments for intersection except at end-points
  - Face finding algorithm: [sage.graphs.generic\\_graph.GenericGraph.faces](#)
  - Region finding algorithm: construct tree based on face containment
  - Partition finding algorithm: iteratively add all reachable nodes to partition
  - Delaunay Triangulation: [Bowyer-Watson algorithm](#)