

Project Proposal

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I plan to do the Project 3 which is **Interactive Geometry Remeshing**. And the libraries I may use is libigl, numpy and triangle.

- **Parametrize mesh** into (UV) plane, **triangulate** UV plane nicely, **transfer mesh back to 3D**.
- Design plane triangulation to **minimize post-transfer distortion**
 - Compensate for parametrization's area distortion: **vertex density proportional to area scaling**.
 - Detect creases in original mesh, constrain these to be edges in triangulation.
 - Optionally increase sampling in "important regions," e.g. high curvature.

