

EXERCISES FOR INF3320

TRIANGLE MESHES 2

1. Consider a general triangle mesh
 - (a) What does it mean that the mesh is a two-dimensional manifold?
 - (b) What does it mean that the mesh is orientable?
 - (c) What is the Voronoi diagram?
2. Draw a triangle mesh that is a manifold and two examples of non-manifold meshes.
3. Create an algorithm that takes two adjacent triangles as input, and returns two Delaunay triangles. Implement your algorithm in C++, and call your function `delauneySwap()`.
4. Create an algorithm for performing Delaunay swaps on a triangle mesh, until it has reached its global optimum. Implement your algorithm in C++.
5. What is the relation between the Delaunay triangulation and the Voronoi diagram?