

University of Utah

School of Computing

CS 4960

Project #5

Spring 2016

Due April 26, 2016 at the start of class

Please contact the instructor Bei (beiwang@sci.utah.edu) or TA Vikram at (vikram.raj@utah.edu) for questions regarding the project. Please contact Vikram for questions regarding Blender specifically.

The project submission should include all your source code, the output files of CGAL (according to Blender format requirement described later), the input files to Blender (using the parser.c), and screen captures or outputs from Blender or some other tools that visualize your results.

Mesh Generation in 2D or 3D

Use CGAL library involving some form of meshing, for example (but not restricted to), 2D Conforming Triangulations and Meshes:

http://doc.cgal.org/latest/Mesh_2/index.html#Chapter_2D_Conforming_Triangulations_and_Meshes
to complete the following task.

Task (15 points): Generate a 2D or 3D mesh that can be visualized. This is pretty open-ended, in a sense that you can generate any mesh from any data points you want. For example, for the 2D conforming mesh, you would give as input a rather complex polygon and apply the 2D conforming mesh library to generate a corresponding mesh.

5 points for having a CG output file that describes the mesh structures. 10 points for visualizing the mesh in Blender (or some other visualization tool).