

## DS-GA-3001.017/.018 Special Topics: Scientific Visualization

### Assignment 1: Corner Table Data Structure

Due date: February 20

Build a code to read a triangle mesh in *.off* format and structure it in a corner table data structure. To attest the correctness of your code, read the file “socket.off” (download from NYU classes repository) and print:

- 1) The coordinates of the vertices linked to the vertex with index 3 (assuming the vertices are indexed from 0).
- 2) The coordinates of the vertices making up the face (triangle) with index 3.
- 3) The coordinates of the vertices of the triangles sharing an edge with the triangle with index 3.

PS. Details about *.off* files can be found in <http://people.sc.fsu.edu/~jburkardt/data/off/off.html>