Course Project for Data Visualization, Spring 2020

Dr. Shahryar Rahnamayan, PEng, SMIEEE

Submission deadline: 11:59 PM, June 20, 2020 (a hard deadline; will not be extended)

(second option for the course project)

Problem Statement: Assume that we want to propose a 3D-RadViz visualization method, in fact, we want to map the data points from dimension N to the dimension 3 using a similar method like the RadViz. So, you need to connect the N springs to surface of a sphere to map points to inside of that sphere, in order to do so first you need to somehow distribute uniformly the N points on surface of the sphere (a deterministic method is more desirable), then you can obtain formulas for x, y, and z mappings similar to what has been done for RadViz method. Case Studies: Use your proposed method on 24 datasets given in the following link: http://archive.ics.uci.edu/ml/index.php

Deliverables:

- 1) Detailed explanation of proposed visualization scheme(s) as a .pdf file. Analyzing advantages, disadvantages, and limitations of the proposed schemes.
- 2) Developed code with results of mentioned 24 test cases.
- 3) Readme.txt file to explain how to run the code.