CS 429/529 Assignment 1

Assignment Release Date: Thursday, September 29, 2022

Assignment Submissions Due: Thursday, October 6, 2022 (Due 23:59 Istanbul Timezone)

Assignment Submission: Submit on Moodle

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Important Notes Before You Start:

• Your homework assignment file(s) name should include your full name (first and last name) and the assignment number. Your submission should be submitted as a single compressed file on Moodle using the following name template:

- FirstName_LastName_A_#no.zip
- Homework assignments are to be done individually, partnering on this homework assignment is not allowed.
- Penalty points: Submissions not following the requested file naming/format will receive a 10 point cut.

Exercise 1: Software Installation and Readiness (20%)

Install and familiarize yourself with a generic social network analysis tool of your choice (e.g. Gephi, ORA, or something equivalent):

- 1) (10%) Describe why you chose this particular software and which features of it made it attractive/usable for you as compared to the others.
- 2) (10%) Briefly explain the steps you follow to set up the tool.

Exercise 2: Software Installation and Readiness (80%)

- 1) (40%) Using VOSviewer, download data for a scientific journal in your area of interest or a scientist (Do not use Prof. Korpeoglu as your author of choice since this was covered as an example in the class.)
 - a) Correct and clean up your data.
 - b) Generate/export both map and network files as needed.
 - c) Include your data files and visualization in your submission

- 2) (40%) Import the network data generated in Step-1 of this exercise into the more generic tool you have installed in Exercise-1 such as Gephi, ORA, or another tool of your choice.
 - a) Include your converted data files in your submission.
 - b) Comment on the shape/structure of the network you are observing.
 - c) Comment on what was expected/unexpected, what was surprising for you to see.
 - d) Identify the most important two nodes in the network, and explain why they appear as important.