

CS 529 – Assignment 1

Report

Kutay Taşcı

22101359

Exercise 1: Software Installation and Readiness

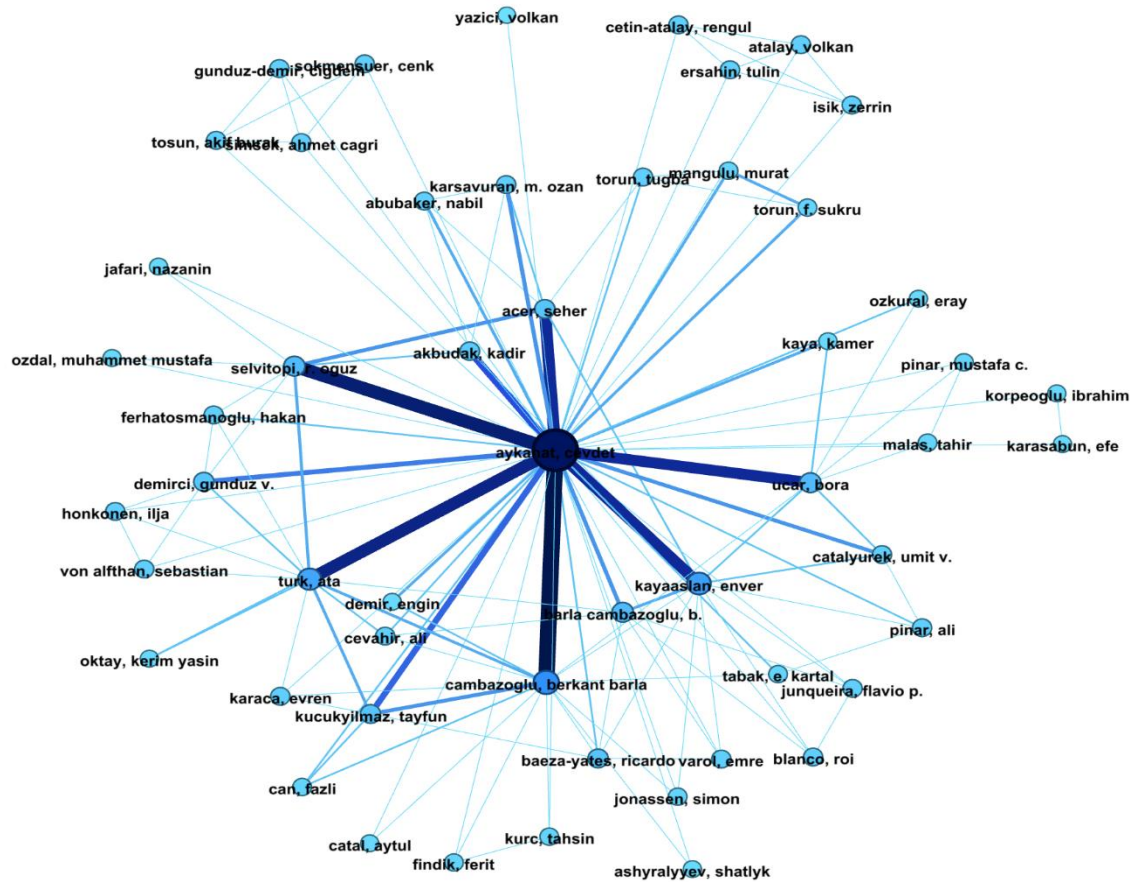
My preferred social network analysis tool is Gephi. Because it is a free/open-source tool and recommended in the class. I thought familiarizing with an available tool will be helpful for the future. Also it has wide variety of input formats and functionalities. I am also thinking about installing ORA, if needed.

I installed the software from the Gephi's website on my windows computer. I didn't encounter any problem on installing. It was easy to install and ready to go immediately.

Exercise 2-1:

For this part I installed VOSviewer and downloaded Co-Authorship graph of my advisor Prof. Dr. Cevdet Aykanat from Web of Science. I did some cleaning on the data with using thesaurus file. I also exported network and map files to be able to use in Gephi.

Graph I generated can be seen below and also in files:



Since this is an ego network you can see Aykanat, Cevdet is on the center. Network is formed around few popular nodes like Turk Ata, Uçar Bora, Selvitopi Oğuz etc. Most of the other people has less degree and edge weights. It is possible to say that these people did many researches with Prof. Aykanat and other people are probably their students or other researchers that Prof. Aykanat did little research with them.

I have expected to see many of the popular nodes, but I quickly realized there were some people less involved with the main ego vertices. This problem is caused by Web of science, because their database goes back to early 2000's and does not have data about the papers published before. Also Oğuz Selvitopi has higher degree and edge weigh than I thought.

Most important node is of course Prof. Aykanat, since this network is his ego network. But two of the most important nodes are Barla Cambazoğlu and Oğuz Selvitopi. Barla Cambazoğlu has high degree and his connection weight with Prof. Aykanat is higher than others. Oğuz Selvitopi has also strong link with Prof. Aykanat and relatively high degree compared to most of the other people.