

Complex Networks - Assignment 3

October 17, 2023

1. The main goal of this homework is to apply on a real network (the Network of Quakers <https://en.wikipedia.org/wiki/Quakers>) everything learnt during Chapter 7.

Your guide will be the following article: <https://shorturl.at/oqxEQ> (this is the link of the pdf file <https://shorturl.at/kpBKM>).

Try to reproduce everything (or almost everything) in this article and become familiar with the full potential of NetworkX as a great tool to analyse a complex network.

The guide article only covers a part of the contents of Chapter 7, then investigate and compute the rest (when it makes sense to do so) by yourself.

Just submit a pdf file of 2-3 pages with the most interesting results and conclusions you have obtained.

Think of this task as the preamble to the Final Project. That is, investigate, learn, and also save all the information of interest to be replicated in a near future over different networks. Ask questions, compare and share your work with your classmates.

Note. If you are not confident with the network of the guide article, or you are more interested in another network for any reason, please select and work on a network of your interest.

Others links of interest:

- https://www.kirenz.com/post/2019-08-13-network_analysis/network_analysis/
- https://www.cl.cam.ac.uk/teaching/1415/L109/l109-tutorial_2015.pdf