

Pajek Instruction 1

Download Pajek Pajek is free, available on its official website:

<http://pajek.imfm.si/doku.php?id=download>.

Please download “version 2.05 / Book edition 2” in section “Pajek 2.*” - This is an old version of the software. We suggest this version because you can find more information about it from the Reference Manual

If instead you have Pajek 3.*, please refer to the following link for a list of changes made from Pajek 2.* to 3.*. (Thanks Jordi, among all discussants in the forum). <http://mrvar.fdv.uni-lj.si/pajek/Pajek205to301.htm>

If you are using a Mac, it will take you several more minutes to install Pajek. Please refer to the instruction [HERE](#): Pajek-OS

Open Pajek and load the data set:

- go to the “File” tab at the top of the Pajek page
- go to the “Network” in the dropdown
- select “read”
- find the directory where you have stored the data, and open it.

Using Pajek, draw the network:

- go to the “Draw” tab at the top of the Pajek page
- click “Draw”
- you can play a bit with different layouts
 - go to the “layout” tab at the top of the figure page
 - click on some of the variations (circular, energy, etc.) and it will redraw things

Using Pajek calculate average degree of the network:

- go to the “Info” tab at the top of the Pajek page
- click “Network”
- click “General” and then “OK”
- it will generate a new window called “report”, from which you can read basic properties of the network

Using Pajek calculate diameter of the network:

- go to the “Net” tab at the top of the Pajek page
- click “Paths between 2 vertices”
- click “Diameter”
- in the window “Report”, you can find the Diameter

Using Pajek calculate clustering coefficients for each node:

- go to the “Net” tab at the top of the Pajek page
- click “Vector”
- click “Clustering”
- click “CC1” and then “input”¹
- it will generate something listed under “vector” on the Pajek page. You can double click on that to get the output numbers for clustering of each node

You can also play with some other data sets if you like: There are ones on international trade (World.trade.paj) and one on social interactions of a group of women based on which events they participated in (Davis.paj). In those cases you should “read” them in as “Pajek project files”. Both of them are available in “Data” under Pajek installation folder. You can find other ones by googling.

¹CC1 gives the clustering in the first neighborhood, while CC2 expands the neighborhood. The primed versions weight the coefficient by a node’s degree. CC1 corresponds to the measure we will cover in class.