

Assignment # 5: Community detection

October 27, 2020

Advice:

1. Load data and compute basic characteristics of the network:
 - (a) use file `viber.csv`,
 - (b) identify pairs of communicating IPs,
 - (c) total amount of destination IPs,
 - (d) identify communities of IP addresses (using Louvain algorithm),
 - (e) visualize the network of IPs - with nodes colored according to their community.
2. Identify IP addresses that provide communication with different communities and visualize network consisting of only those IPs.
3. Identify 10 most used destination ports with respect to:
 - (a) the amount of packets,
 - (b) the total amount of bytes transmitted.
4. Put them into your report together with the amount of packets or their size, respectively.
5. Visualize the traffic density on those ports over time - both amount and total size of packets.