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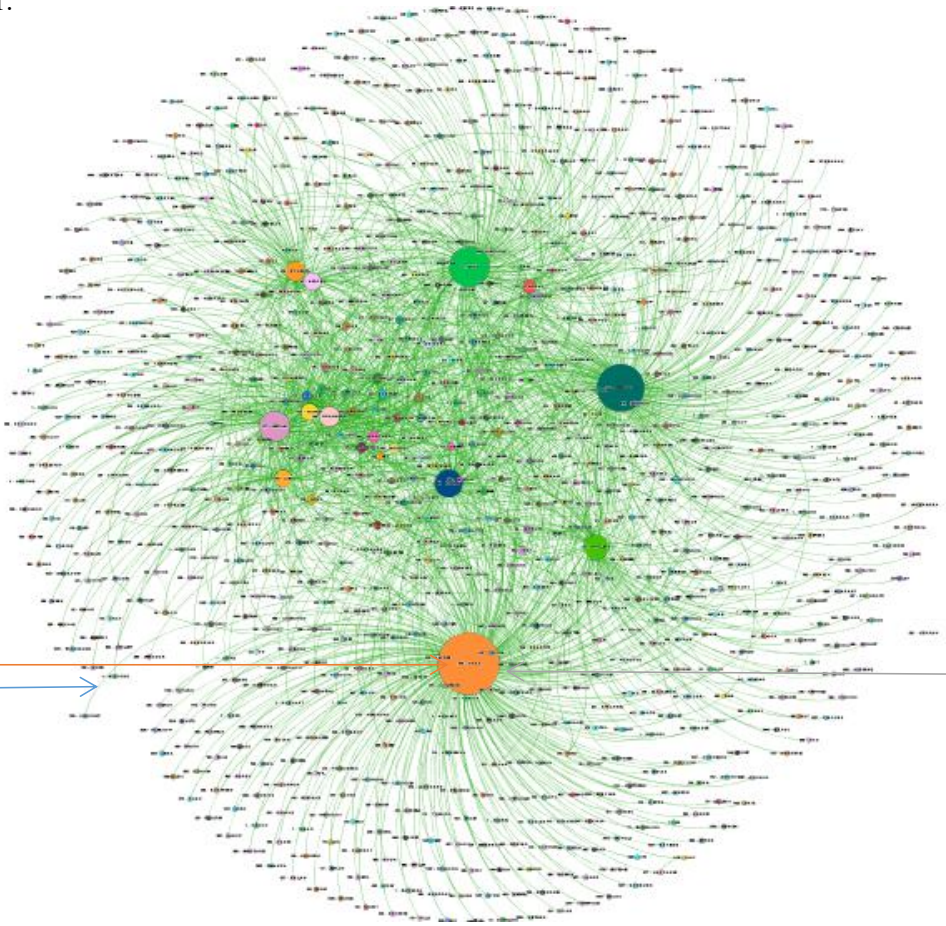
1.visualization method

I used Gephi to visualise my the graph and I used algorithm of Fruchterman Reingold to present the graph. The dataset contains the friendship network of a German boys' school class from 1880/1881.



2.An image caption

Edge: Represent the friend relationship between two nodes.

Node: A student is a node.

Label: Show the “pauseid” (abbreviation of the student’s name) and “rank” (school performance).

Edge size: Size of edge ranks from 1 to 5, according to the weight.

Node size: Size of node ranks from 10 to 150, according to the degree.

Node color: Color of node represents to different rank level."

3.A paragraph interpreting your network

Due to Degree(331, rank No.1) and Eigenvector Centrality(0.955721, rank No.2), the most important node of this graph is node“GAAS”. Besides “GAAS”, there are also other important subgroup nodes, like the subgroup around node “PETDANCE”, “ADIE”, “BDFOY”, “STEVAN” and “DROLSK”. In conclusion, This boy’s school has several important friend circles, the subgroup nodes are dispersive.

Other insights:

It seems that some students who have strong popularity(degree) may not rank the top of school performance(rank), such as nodes “PETDANCE” and “GAAS”, but there also some student who can do well in study as well as interpersonal relation, like nodes “BDFOY” and “ADIE”.