

## Tutorial/Workshop Session 3: Martin Grandjean (Lausanne University)(@GrandjeanMartin): Introduction to Network Visualisation with GEPHI

Network Visualisation Tool: <https://gephi.org/>

Introduction to Network Visualisation

Import csv files (we don't talk about the preparation of the data today).

File for Nodes (points)// File for Edges (connexions between points)

Edges have a source and a target

There are several centrality measures: By degree (number of connexions) / By closeness (closeness to the entire of the network) / by Betweenness (bridge part of the network) / Eigenvector (pageRank-style centrality - the more well-connected nodes are linked to you, the more you are central). And the more you are central, the more your neighbors are too. [a really good piece of work on centrality indices [http://link.springer.com/chapter/10.1007%2F978-3-540-31955-9\\_3](http://link.springer.com/chapter/10.1007%2F978-3-540-31955-9_3)]

### RESOURCES:

**Examples** shown during the workshop:

- Twitter during a #DH conference : <http://www.martingrandjean.ch/colloque-dhiha5-les-digital-humanities-se-deploient-sur-twitter/>
- Archives mapping : <http://www.martingrandjean.ch/analyse-de-reseau-nouvel-outil-exploration-fonds-archives/>
- OpenData on State finances <http://pegasusdata.com/2012/11/25/opendata-copinage-au-gouvernement-quand-lanalyse-de-reseau-vient-en-aide-au-journalisme-dinvestigation/>
- GeoLayout plugin about european cities : <http://www.martingrandjean.ch/archives-cartographique-geopolitique-megalo-urbanisation/>

The **complete tutorial** to be able to analyse your facebook network :

<http://www.martingrandjean.ch/analyser-graphiquement-reseau-facebook/> Which is also a good **tutorial to GEPHI** if you avoid the part 1 about facebook, replaced by your own data or by the datasets prepared for the tutorial (data here: <http://www.martingrandjean/gephi/>).