

# **Session IV**

## **Digital methods and research projects**

# European ecosystem for Digital Methods

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Research groups developing free libre open source tools:

- Digital Methods tools  
<https://wiki.digitalmethods.net/Dmi/ToolDatabase>
- Sciences Po Médialab tools  
<https://tools.medialab.sciences-po.fr/>
- DensityDesign research projects  
<https://densitydesign.org/projects/>



# Research projects

# Evaluation criteria

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- Motivation of the chosen project
- Formulation of the research question/goal/hypothesis
- Description of the dataset and the construction process
- Presentation of results
  - Type of network (directed/undirected)
  - Centrality measures
  - Community detection
  - Filters
  - Colors, sizes and layouts
- Discussion of limitations and biases
- Proposal for future work

# Most Wholesome Network

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- which one is the most positive online community?
- why is it more positive than other ones?
- what type of users does it have?
- what type of content?

**Data/tools** <http://tcat.domesticstreamers.com/analysis/>

# DMI-TCAT

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- Access to our TCAT <http://tcat.domesticstreamers.com>  
(credentials are available at Google Drive)
- Download **Tweet stats**
  - Explore it with Spreadsheets!
- Download **Twitter client (source) frequency**
  - Explore it with Spreadsheets!
- Download **Social graph by mentions**
  - Explore it with Gephi!

# Evil Millionaires

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- Visualize the wealth of the richest people on earth
  - how much do they give to charity
  - how much do they make a day
  - backgrounds - nationality - gender - age etc.
- How “evil” are they? could their wealth save some of the earth’s problems if they decided to invest it?
- what type of people are they?
- how many scandals do they face?
- how different are they treated?

## Data/tools

<https://www.piie.com/sites/default/files/wp16-1.zip>

<https://www.kaggle.com/seriadiallo1/world-billionaires>

# Table2Net

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- Unzip <https://www.piie.com/sites/default/files/wp16-1.zip>
- Convert the XLS to CSV
- Access to [medialab.github.io/table2net/](https://medialab.github.io/table2net/)
- Create a bipartite network of citizenship and sector
- **Explore the network with Gephi!**



# Corruption

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- Hesitation: How is it possible that there is so much around the world among powerful people?
- Investigation: Analyze how long does it take for justice (law and courts) to judge and incarcerate someone corrupted and powerful. Is it linked to the amount and relevant connections/relationships they have? (Are they hubs and therefore it is more difficult to turn them down?) Compare to less powerful corrupted figures.
- Context/variables: Restrict to a single country. It might be easier to define. Although it would also be interesting to analyze this topic across the world.
- **Data/tools** <https://quienmanda.es/topics/bankia>

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- Access to Bankia <https://quienmanda.es/topics/bankia>



# Spotify Wrapped

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- the 99 songs I listened to the most during 2020.
- gender
- genre
- nationality
- times played
- instrumental or voices
- length
- time listened in total
- how much did the artist get paid?

**Data/tools ?**

# Water

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- how much water we use=
- could we use less?
- less sweet water bodies, higher sea water levels
- infrastructure
- renewable sources
- where is it running out more

**Data/tools ?**

# Creative Incomes

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- average income per background
- gender
- background
- agencies money
- designer unions
- what users can actually use and afford our designs
- who are we really designing for? – capitalist structure
- how inclusive is design?
- why most of “famous” designers are white men

**Data/tools ?**

# Art World

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- who is it really for?
- How much money is there?
- who sells more by nationality, gender etc
- tax evasions
- volatile prices

**Data/tools ?**

# Countries

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- Best and worst prepared for a pandemic or natural disasters

**Data/tools ?**

# Homework

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Watch the following documentary:

*Kantayya, S. (2020)*

*Coded Bias*

*Production Co*

<https://www.imdb.com/title/tt11394170/>

