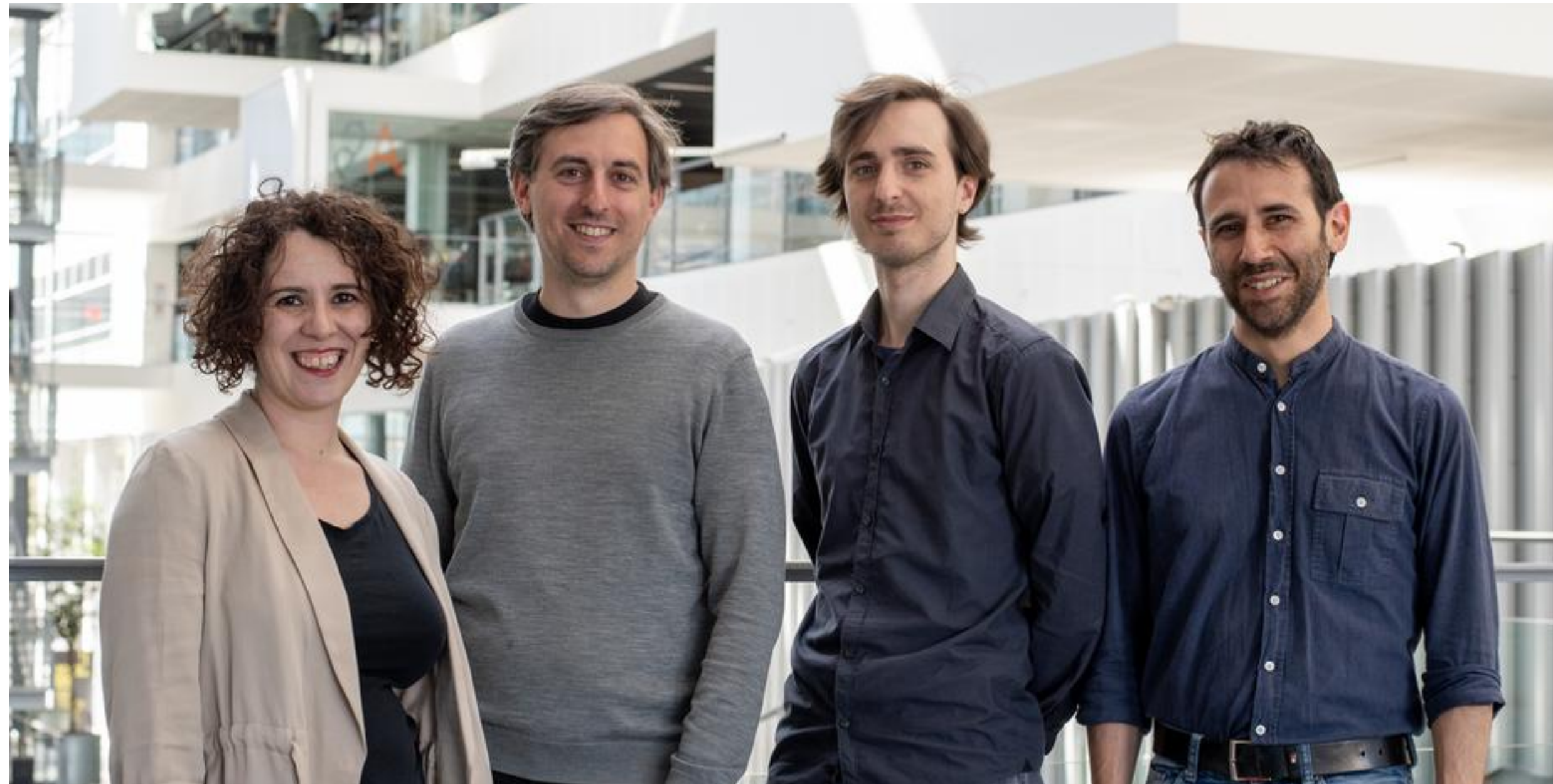


Projects for the Research Project Market
ITU, Aug. 26th 2019

NEtwoRks, Data and Society (NERDS) research group



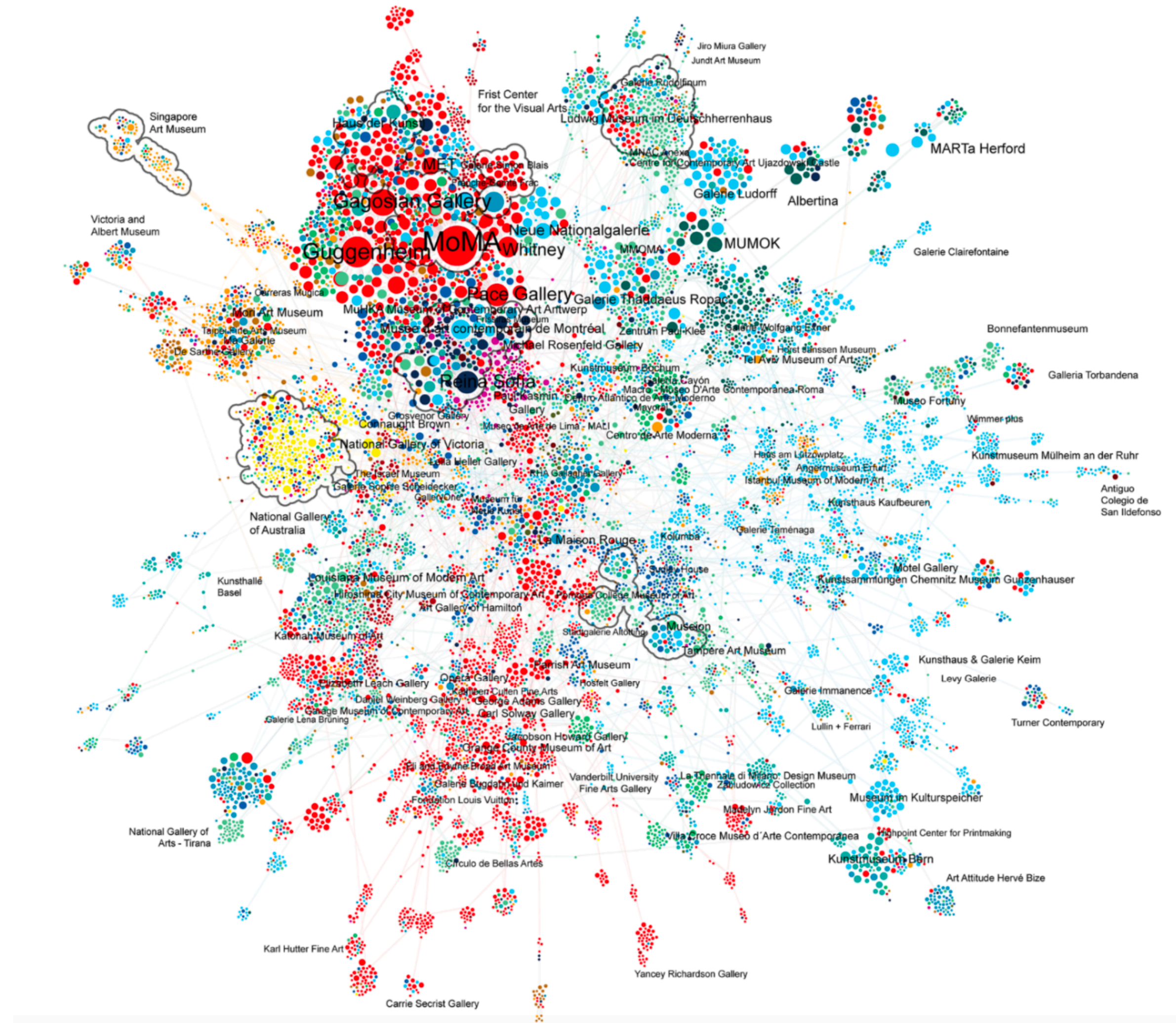
<https://nerds.itu.dk/>

NEtwoRks, Data and Society (NERDS) research group

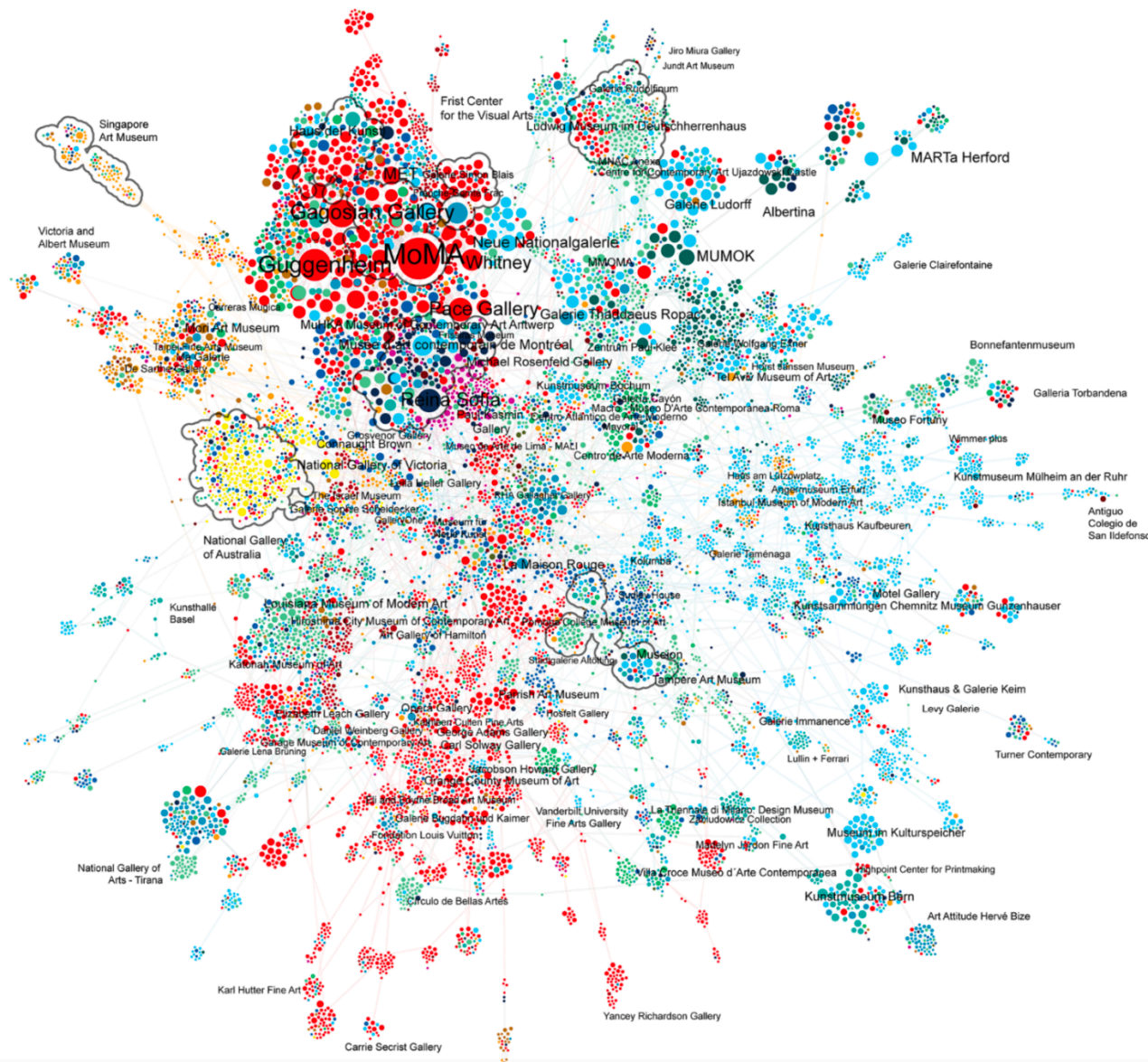


<https://nerds.itu.dk/>

Our expertise is network science



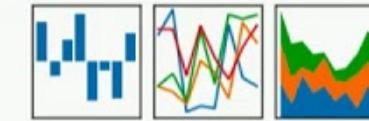
We research network and data science applications to social systems



Our Typical Tools

pandas

$$y_{it} = \beta' x_{it} + \mu_i + \epsilon_{it}$$

The Apache Spark logo, featuring the word "APACHE" in a small, sans-serif font above the word "Spark" in a large, bold, sans-serif font. To the right of the text is a stylized orange star with a thick outline.

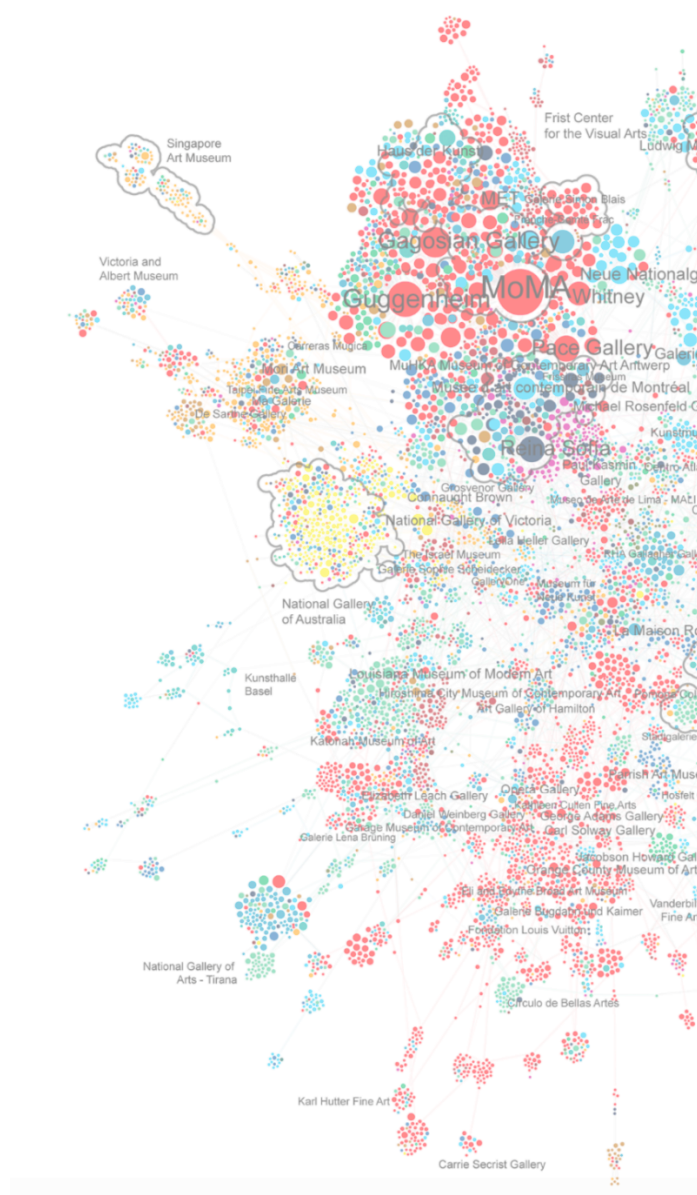
SQL, Hive, BigQuery, Spark, R, Python, Scala, AWS, etc.



SQL



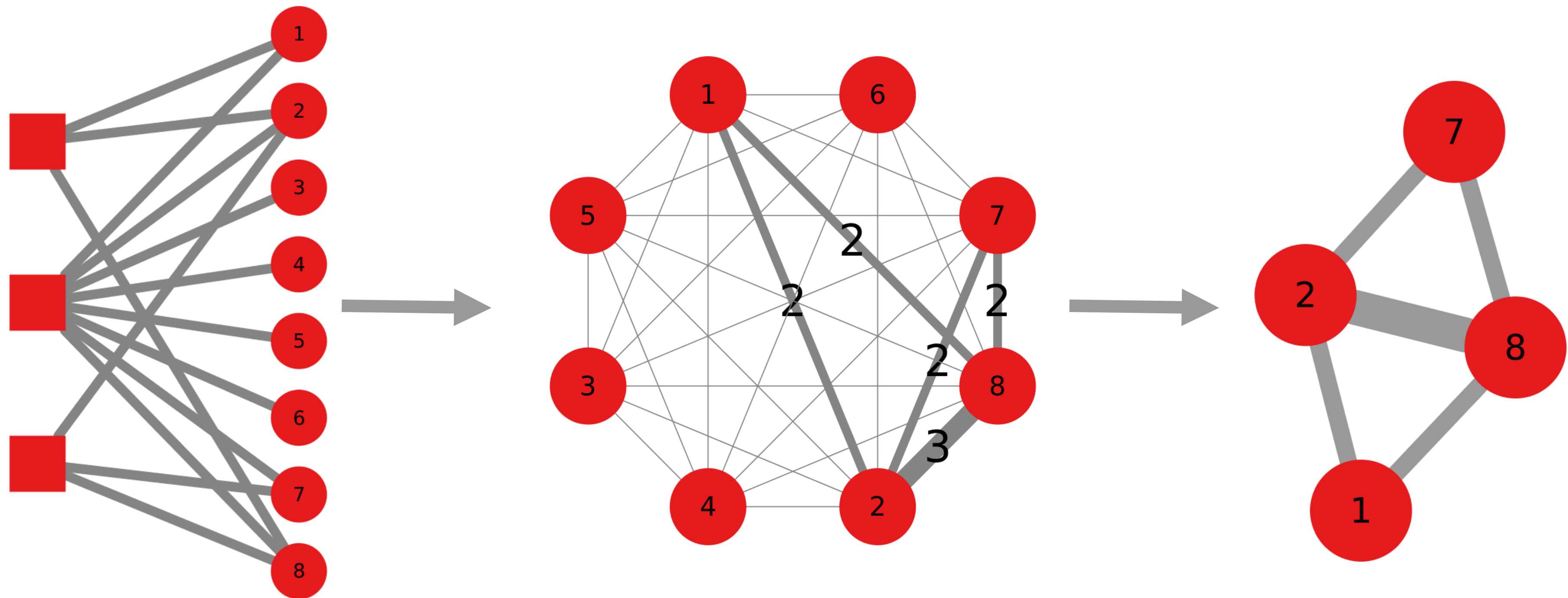
We research network and data science applications to social systems



4 projects

(Project 1), Projecting and backboning bipartite networks

Supervisor: Michele Coscia, Luca Rossi. Recommended for SD and CS students



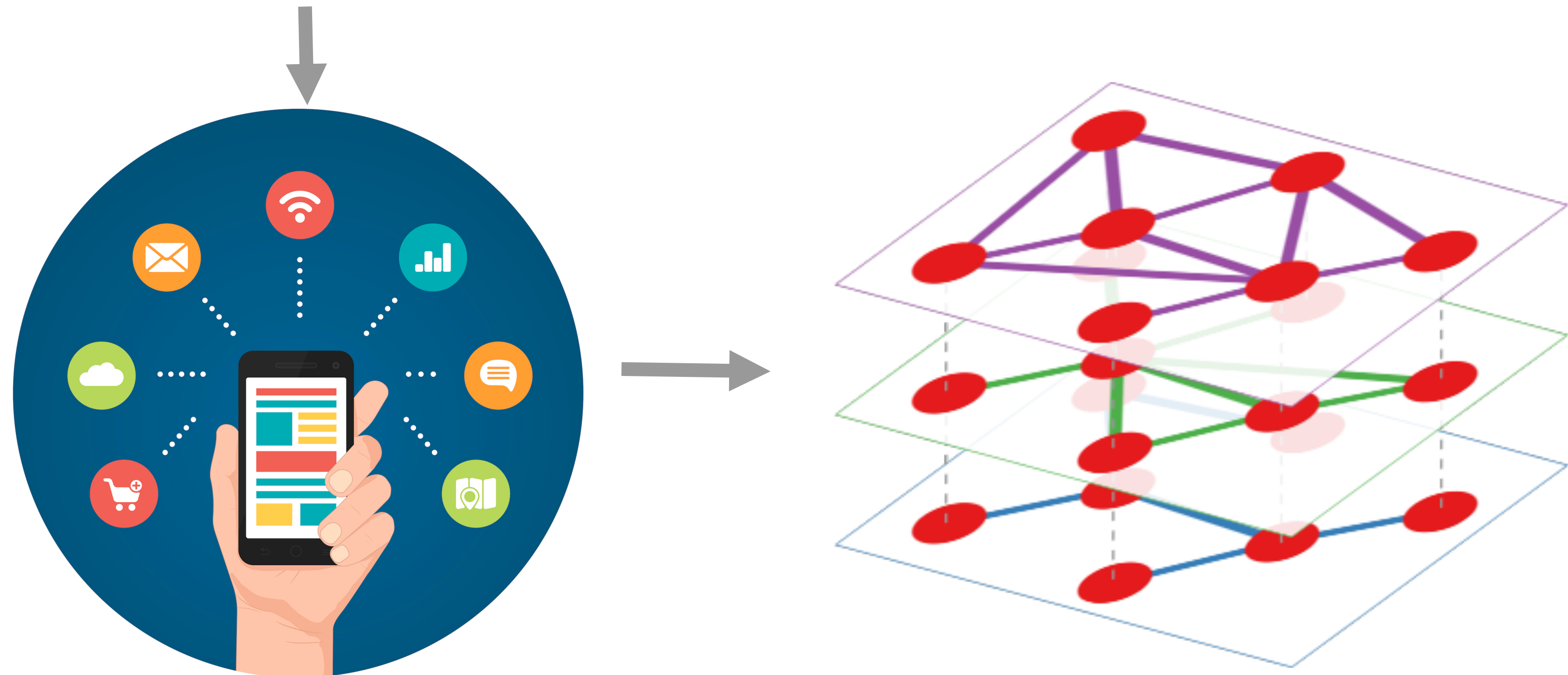
More project ideas:

http://www.michelecoscia.com/?page_id=1626 (4E04)



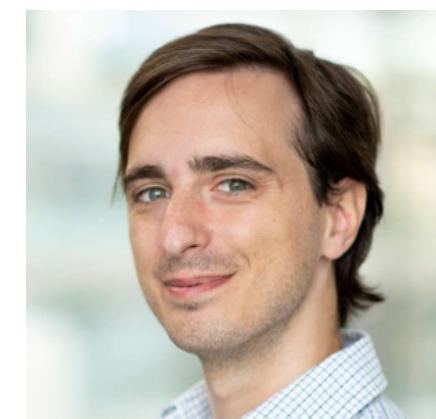
(Project 2), Creating and analyzing the ITU multi-layer network
Supervisor: Michele Coscia. Recommended for CS students

IT UNIVERSITY OF COPENHAGEN



More project ideas:

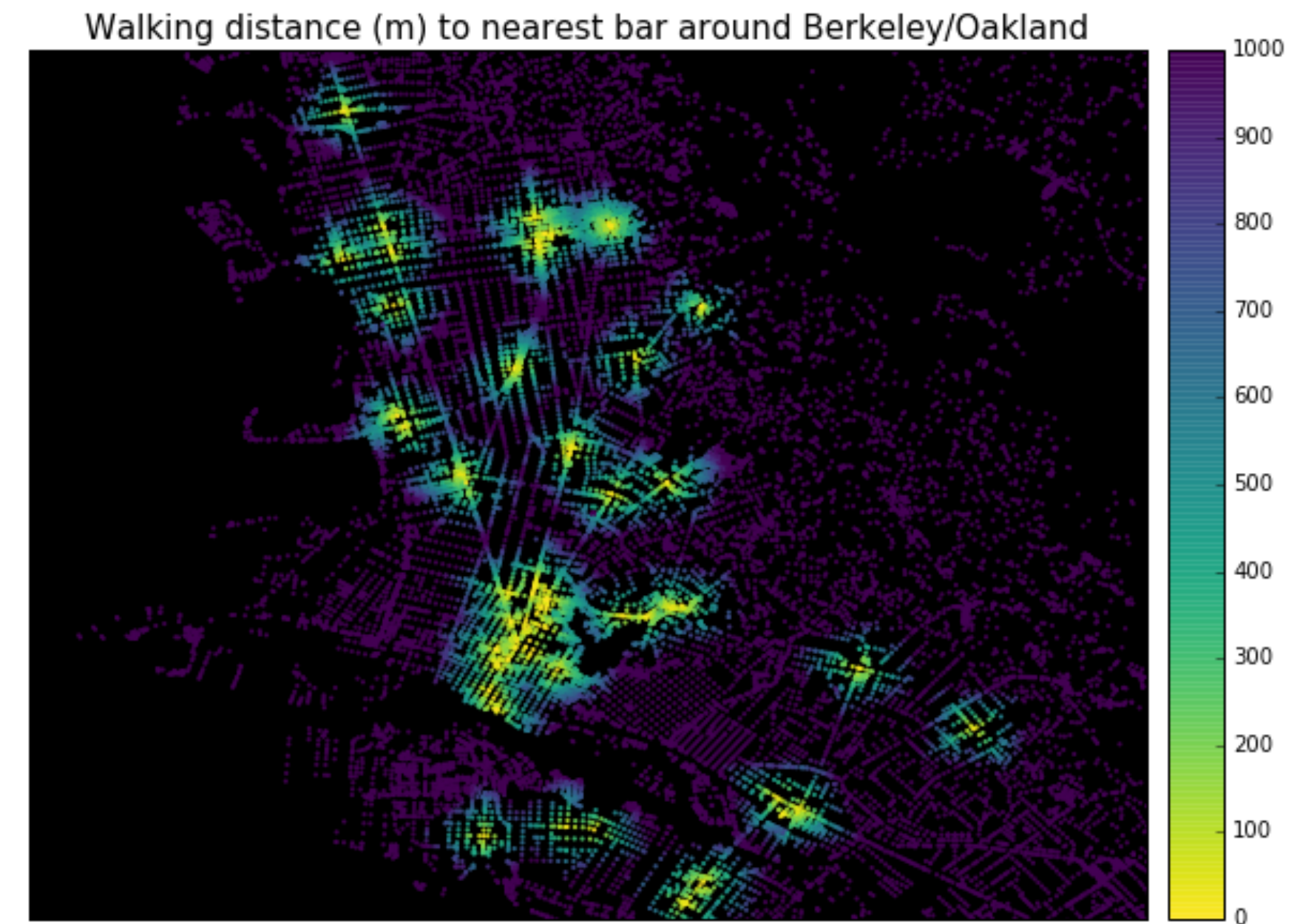
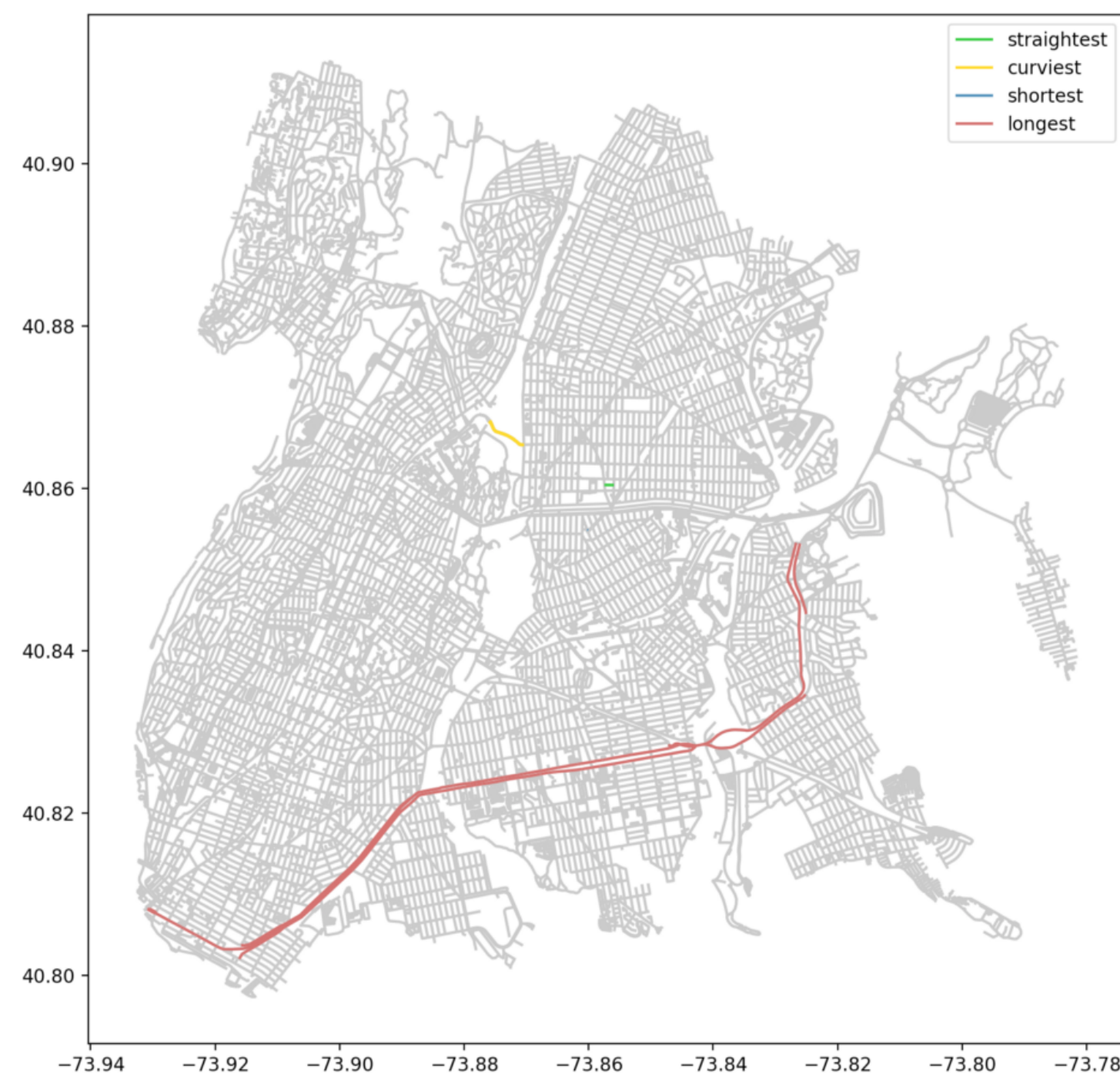
http://www.michelecoscia.com/?page_id=1626 (4E04)



(Project 3) Use OSMnx to explore urban infrastructure networks

Supervisor: Michael Szell. Recommended for CS students

Accessibility/walkability: <https://github.com/gboeing/urban-data-science/blob/master/20-Accessibility-Walkability/pandana-accessibility-demo-full.ipynb>

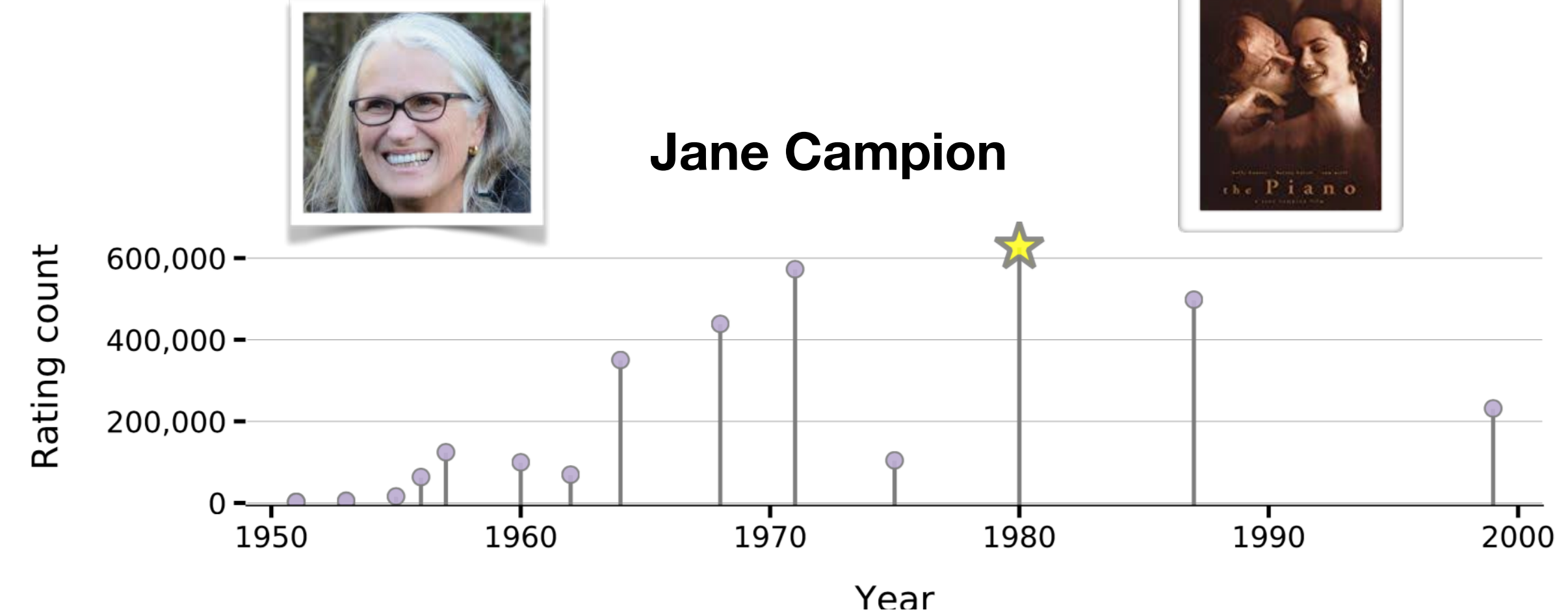
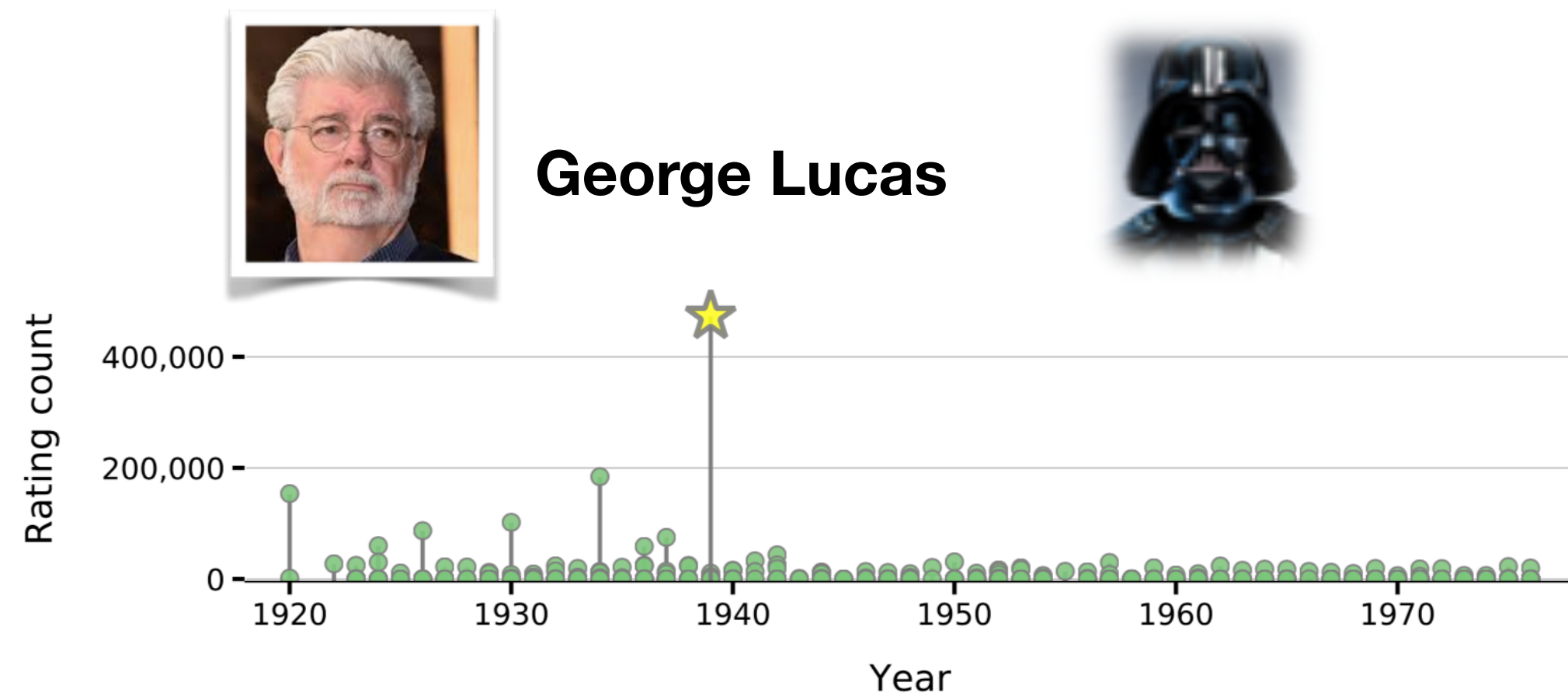


Rad roads: <https://medium.com/a-r-g-o/rad-roads-using-osmnx-68fc8b15f046>

michael.szell.net (4E04)



(Project 4), Gender differences between movie director careers
Supervisor: Roberta Sinatra. Recommended for SD and CS students



Work with IMDb data

Learn and use time series analysis tools

Learn and use network analysis tools

Perform data mining and prediction tasks

Make connections with Computational Social Science

www.robortasinatra.com (4E13)



All the proposed projects can have the format
Research project (7.5 ECTS) + Thesis (30 ECTS)

Drop us a line to meet and
discuss these projects in more details