



# Towards a more Digital Digital Humanities

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## Digital Humanities?

- The digital revolution requires that scholars rethink the history of information in the past
- Explore how digital platforms and computational tools can and should transform knowledge in the present
- Combining Humanities with statistics, data science, and natural language processing to gain new insights

## Digital Humanities: Past & Future

- There are two approaches in digitizing humanities
  - Past: Digitize texts, images, and music and make them available for computational analysis
    - By revealing patterns and structures never before perceptible, data mining, network analysis, text encoding, and geographical tagging.
- Future: How are computers and online media changing what it means to be a person and a politically engaged citizen

## Computational Needs

- Exploration of historical data combining spatial, temporal and relational views at once.
- Visualizing audio data
- Mapping and Overlaying historical data on modern maps
- Data mining historical text to reveal otherwise hidden structures

## Computational Resources

- Both approaches requires diverse and large amounts of computational resources for:
  - Colleting Data
  - Analyzing Data
  - Data Mining (Looking for patterns in texts)
  - Machine Learning (AI!)
  - VR, AR, 3D modelling
  - High Performance Computing (e.g. Economy simulations)
- Where to host all these tech: on prem vs cloud.

## Communication and Training

- Introducing latest trends in data analytics and programming to humanities folks.
- Teaching programming to poets
  - Start with ready to deploy tools
  - Use modern languages that are easier to learn quickly to deploy new tools (e.g. python for ease of entry point)
  - More complex programming might require partnership with more technical departments (e.g. simulations of entire US economy repeated over several million times)

## Final Reflections

- There are some unique challenges for constructing a Digital Humanities Center at the university
- There are also some challenges that are well known for any new technology deployment project
- Depends highly on human capital and their willingness to learn new tools
  - This also depends on IT budget, and also budget, and some more budget constraints.



# Q & A