Data-Intensive Digital Humanities

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What is digital humanities?

• The application and use of new computational tools and systems for research in humanities and social sciences
  • Sociology
  • Social psychology
  • Linguistics
  • Political science
  • Etc.
• We make use of new state-of-the-art computational methods and digital technologies for collecting, managing, analyzing and mining data
Data-intensive digital humanities

- Basic research in various disciplines
- Visualization expertise
- Pedagogical and societal relevance (Digital Humanities)
- Technical expertise
- Societal Collaboration
Basic research
Big language data

• What if we could…

• Analyze for instance what people in Sweden talk about in public?

• Strict ethical guidelines: focus on macro-level patterns – not individuals

• Exploring the relationship between language and thought – public sentiment, consumer trends

• Text and data mining tools to analyze big and complex data sets
Evidence (linguistic competence)

Data (computer scientists)

Public sentiment?
Big language data

- The Nordic Twitter Stream initiative
- A robot to monitor geocoded Tweet stream in five Nordic countries
- Real-time window to the world
- User-generated content – what do we talk about on a really big scale?
- A consortium of linguists and computer scientists
- NTS some statistics
  - Tweet Count (last Thu): 7,827,042
  - C. 75 million words
  - Tweets from 202,097 users
  - Metadata points: nearly half a billion
  - Adding daily
Moving beyond public sentiment

• Making use of big and rich language data
• Who are those individuals who act as “bridges”, who are the early adopters of an innovation?
  – Very early stages – visualization expertise needed
  – A massive and rich dataset
Some findings
Pedagogic and societal relevance
DIGITAL HUMANITIES INITIATIVE AT LNU
https://lnu.se/en/digihum/

• Has so far built an impressive international and cross-sector network of about 100 partners
• LNU the first Swedish university, thereby making Sweden the second Nordic country, to have joined DARIAH-EU
Stage 1: 2016

- Strategy creation
- Dissemination / networking
- A Master proposal submitted to FKH Education Board
- 8 pilot projects
- Two proposals funded
...Stage 1: Pilot project examples

- PEAR: Augmented Reality for Public Engagement (Växjö Kommun, Media Technology Department)

- Digital story telling (Smålands Musikarkiv, Det fria ordets hus, Media Technology Department)

- Data curation needs and use cases
  - Växjö Kommun, Cultural Sciences Department
  - LNU Library, Lund University Library, Cultural Sciences Department

Engaging companies

• OnSpotStory, Stockholm: Erasmus+
  • GLAM collaboration

• Exploring collaboration with companies working with the GLAM sector

  • In IEC
  • Involved in LNU’s current projects
    • Archeology
    • Marketing
Planning for the future

• **Long-term vision:**
  - Create a leading education, development and research regional centre
  - Co-creation with public and private sector from the surrounding society
  - **Addressing future societal challenges** by highly skilled professionals (whose education has been markedly practice-informed education) and joint, cross-sector innovation
  - DARIAH-EU Nordic Hub collaboration on research and education

• **Strategic values to be developed:**
  - Uniting and consolidating the expertise we already have to create new constellations for collaboration leading to new knowledge and products (expertise, education, research, public and commercial services relevant for the region), resulting in a return on investment
  - A (re)-affirmation of the value of humanities in particular, and academic practices in general
New projects

• Developing attractive information landscapes for the mapping of cultural events using web technologies
  – Nya Småland

• LNU as a unique iSchool