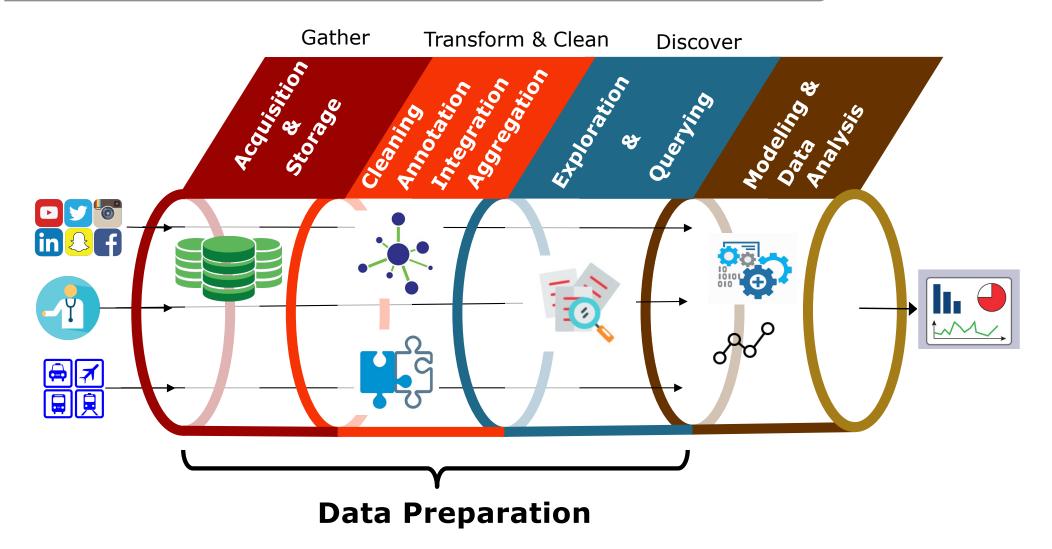
The Data Processing Pipeline











Data Preparation: Automate tasks that are traditionally tedious

• Data Quality: Trust your data

- Work with data inherently noisy, containing duplication, and coming from untrusted sources
- Fairness & Explainability

Knowledge Base construction & Graph Data

- Techniques and tools for the automatic creation and management of knowledge graphs.
- Coping with evolution
- Network Science

• Data Catalogs: Discover and Use the right data

- Identify the data that is best suited for a task at hand
- Searching through examples (not queries)
- Data Matching & Integration: Support Federated Learning
- Enabling combinations of streaming and static data for efficient data analysis

Data Maintenance

- Focus on the data that matters
- Ensure continuity in the long run

• Data Preparation through ML (especially Deep Learning)

Entity Resolution, Data Exploration, Data Imputation, Data Citation





https://www.uu.nl/en/research/algorithms/data-intensive-systems



Yannis Velegrakis Head of the group

Data Discovery Data Integration Data Quality Knowledge Bases



Mel Chekol

Knowledge Graphs Reasoning Knowledge Extraction



Hakim Qahtan

Data Quality Data Streams Explainable ML Fairness



Ioana Hulpus

Graphs and Text Network Science





https://www.uu.nl/en/research/algorithms/data-intensive-systems



dr. A.A.A. (Hakim) Qahtan Email: a.a.a.qahtan@uu.nl

Assistant Professor



prof. dr. Yannis Velegrakis Email: i.velegrakis@uu.nl

Professor



V. (Vahid) Shahrivari Joghan MSc Email:

PhD Candidate



Enas Khwaileh MSc Email: e.t.k.khwaileh@uu.nl

PhD Candidate



dr. M.W. (Mel) Chekol Email: m.w.chekol@uu.nl

Assistant Professor



dr. I.R. (Ioana) Karnstedt-Hulpus Email: i.r.karnstedt-hulpus@uu.nl

Assistant Professor



M. (Mahsa) Ghanavatinasab MSc Email:

PhD Candidate



D.S. (Duygu) Islakoglu MSc

Email: d.s.islakoglu@uu.nl

PhD Candidate



