Language Intelligence & Information Retrieval (LIIR)

Research group of the Department of Computer Science, KU Leuven Human Computer Interaction section http://www.cs.kuleuven.be/groups/liir/



Research Team

Academic Staff

• Prof. Dr. Marie-Francine Moens

Postdoctoral Researchers

- Dr. Ivan Vulic
- Dr. Jan De Belder
- . Dr. Juan Carlos Gomez
- Dr. Oswaldo Ludwig
- · Dr. Parisa Kordjamshidi

Research Assistants and PhD Students

- · Aparna Nurani Venkitasubramanian
- Denis Lukovnikov
- · Geert Heyman
- Golnoosh Farnadi
- · Niraj Shrestha
- Quynh Do Thi Ngoc
- Susana Zoghbi
- Thomas Provoost

Guest

· Prof. Dr. Steven Bethard



LIIR research team















Reseach of LIIR

- Automatic reading of text and translation to knowledge (= machine reading)
- Search engines, information retrieval and questionanswering systems
- Cross-modal and cross-lingual processing of data
- Data fusion and inference from data

Unstructured (big) data

Applications: World Wide Web, business intelligence, social networks, multimedia, bioinformatics, legal informatics, security, ...



Expertise of LIIR

Since 2007:

Participation in 13 international and European projects, 3
EU COST actions, 1 EU infrastructure project and 11
large national projects (SBO-IWT, FWO, GOA, ...)



Examples of research questions

- How can we recognize patterns in data with a minimum of human input and supervision?
- How can we recognize structured related patterns?
- How can we deal with uncertain, incomplete and noisy information and infer information?
- How can we fuse heterogeneous information (e.g., textual and visual data, information in different languages) in order to improve the recognitions or the search for information?

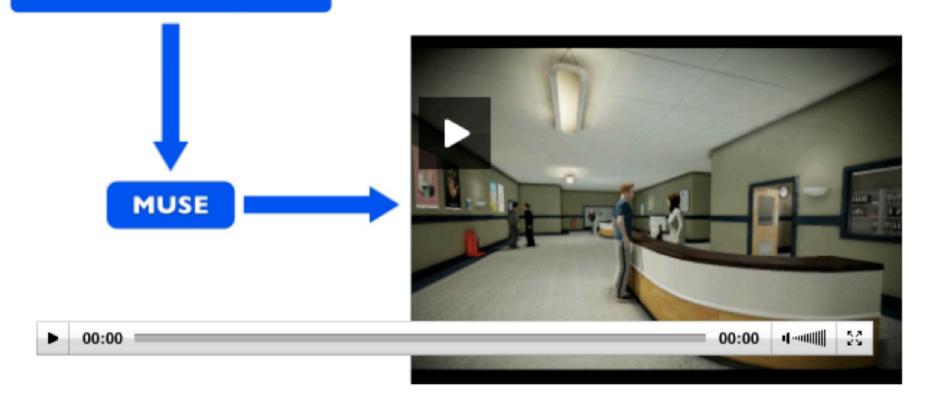
- ...

Machine understanding of natural language

Text source

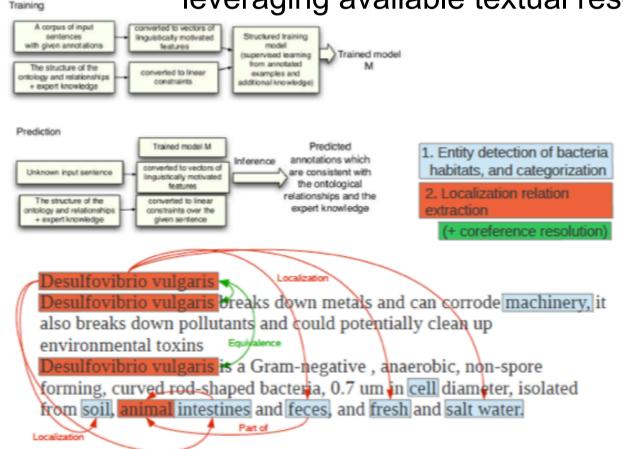
"Admission to the hospital might seem scary, but it does not have to be. When you arrive you will be met by a friendly admissions nurse who knows your doctor well..."

translation of stories for children and patient guidelines into a virtual reality

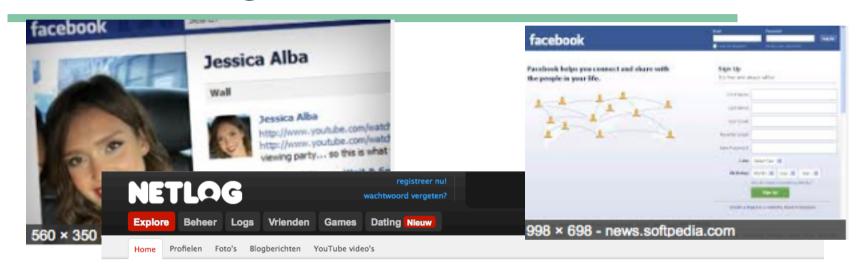


Machine reading of biomedical texts

as tools for researchers and patent offices: leveraging available textual resources



Mining of social media

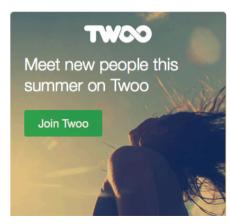


Welkom op Netlog



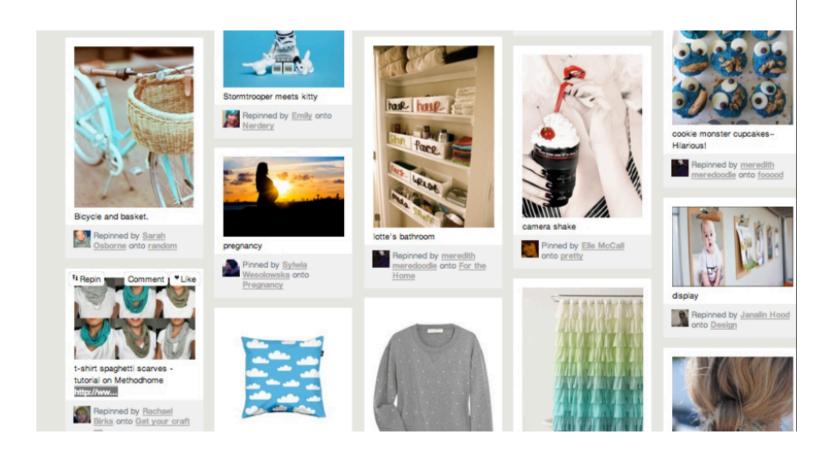
Registreer gratis!





Linking the Web across languages and idioms

Source: Pinterest.com



Cross-modal mining and search

of textual and visual broadcast data



WEDNESDAY, 20 AUGUST



The Islamic State militant group releases a video purporting to show the beheading of US journalist James Foley, who was seized in Syria in 2012.



The frontline of the Ebola crisis



Why some families risk everything to live here



Second police killing in Missouri



Bikini ban: The city where a swimsuit could land you in hot water

MUSCLE CARS



It generates 707 horsepower, tops out at

199mph and on price, undercuts some frightfully powerful competition.

AFRICA'S NEW ENTREPRENEURS



Brewing a beer revolution

"Beer Hunter" Oscar Olsen built a career out of a passion for beer-making - and has chosen Mauritius to make his dreams reality.





