

# UNIVERSITY OF TWENTE.

## Postdoc

### “Machine-Based mapping of Innovation processes”

*Job application committee members:*

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The Storylab at the Department of Psychology, Health and Technology of the [University of Twente](https://www.utwente.nl) in the Netherlands is looking for a

#### **Postdoc researcher in Natural Language Processing/machine learning** In the area of innovation management and business intelligence (fulltime)

### The challenge

Commercial innovation is vital for the future of organisations. Especially to large and mature corporations, managing innovation has become a great challenge, involving large numbers of teams inside and outside organisational boundaries, operating in various timeframes. Our current understanding of innovation processes and how they can be managed does not adequately match today's reality. In this study, we will develop new and more accurate complex innovation process models by exploiting advanced machine learning and natural language processing techniques, applied to the empirical textual data of a large number of cases over an extended period of time. For this purpose, the Storylab seeks an ambitious NLP/machine learning researcher to strengthen our innovative eScience research programme.

### The Storylab

The Storylab <https://www.utwente.nl/igs/ehealth/research/story-lab/> is a Dutch multidisciplinary research centre specialized in technology-enhanced narrative research, and pioneering in text mining/machine learning approaches to change processes. The Storylab is based at the Department of Psychology, Health, and Technology, and currently in the process of widening its disciplinary scope from narrative psychology and e-health to e-humanities and management sciences. It combines a scientific orientation to the international research community with a practice-based focus evidenced by collaborations with local organisations. The Storylab is strongly embedded in the technical university at large and recently received a large grant from the e-Science Centre in Amsterdam.

### Job specification

You conduct research (0,9 fte) in the emerging field of text mining in innovation management. You will be part of a multidisciplinary team, and participate actively in building a UT text mining consortium across University departments (0,1 fte) to lay the foundation for a larger grant application. We are looking for a team player, but also someone who can execute the study without much supervision. The project consists of three phases: 1) supervised machine learning based on existing categories in hand-coded data; 2) unsupervised machine learning including a variety of textual features and connecting these to meta-data; 3) organization of a multi-disciplinary work conference aimed at interpreting the results from phase 1 and 2 from various theoretical and

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methodological points of view. Together with colleagues, you write 2 peer-reviewed articles based on the methods and results of the project.

## Candidate profile

- You hold a PhD.
- You have a strong background in Natural Language Processing and Text mining/Machine Learning, affinity with multidisciplinary research and an interest in innovation processes.
- You have excellent skills in programming and analysis software, such as Python and R.
- In your research, you have demonstrable skills in multivariate analysis.
- You are keen to work in a team and build a university-wide text mining taskforce with colleagues from engineering, social and literary sciences. You have proven ability to communicate across disciplines, or clear interest in developing this ability.
- You are motivated, ambitious, have good social and communication skills, have excellent analytical skills, and can work independently and precise.
- You have published in peer-refereed journals and have relevant international experience.
- You have a strong command of the English language.

## Our offer

We offer a postdoc position (fulltime) for one year in a stimulating research environment, with a unique combination of disciplines. The gross monthly salary ranges from € 3044 up to € 4654,- gross per month (based on experience) in accordance with the job profile under the University System for Job Classification (UJC). In addition, the University of Twente offers attractive employment conditions (for example, 8% holiday allowance and 8,3% end-of-year bonus), excellent facilities for professional and personal development.

## Information and application

For more information, please contact dr. Anneke Sools (e-mail: [a.m.sools@utwente.nl](mailto:a.m.sools@utwente.nl); phone: +31-53-4896314), or dr. Matthias de Visser (e-mail: [m.devisser@utwente.nl](mailto:m.devisser@utwente.nl); phone: +31-53-4893248). Your application should reach us by **15 June 2016**, and should include a CV, a letter of application, a summary and table of contents of your dissertation (or your full dissertation), a relevant research publication, and contact information for 2 references. Interviews will be held in July, and the position starts **September 1 or sooner**. Applications should be uploaded via [www.utwente.nl/vacatures/en](http://www.utwente.nl/vacatures/en).

## About the university and region

The University of Twente. We stand for science and technology, high tech, human touch, education and research that matter. New technology which drives change, innovation and progress in society. The University of Twente is the only campus university in the Netherlands; divided over five faculties we provide more than fifty educational programs. The University of Twente has a strong focus on personal development and talented researchers are given scope for carrying out pioneering research. The Faculty of Behavioural, Management and Social Sciences strives to hold a leading position in their fields in relation to the science and technology research programs of the University of Twente. In all these fields, the faculty provides bachelor, master and professional development programs.

The city of Enschede, in the east of the Netherlands, is a lively city of 150,000, located in beautiful countryside and near spectacular nature areas. It is only two hours away from major European cities like Amsterdam, Cologne and Düsseldorf, three hours from Brussels and also close to London, Paris and Berlin.