

Dies ist eine Zweitausschreibung in Englisch

## Senior Researcher, tenured

### Chair of Computational Social Sciences and Humanities

#### Our profile:

The Chair of Computational Social Sciences and Humanities contributes essentially to the development of RWTH Aachen University as an integrated interdisciplinary university of technology by building bridges between the Department of Computer Science and the Humanities and Social Sciences.

At the chair, the potential and challenges of computational methods and big data in social science contexts are explored and analysed via practical experiments, computational models and studies, and empirical observations. At the same time, we analyse the impact of an increasing digitalisation (web, smartphones, etc.) and the influence of algorithms on social systems.

The main fields of research at present are:

- i) Measurements of digital societies: how can the state of a social system be inferred from its digital footprint (from social media, from ubiquitous sensors, etc.) How can different biases in the digital footprint be recognized and measured?
- ii) Algorithms: which influence do algorithms have on digitalized social systems (cf. filter bubble); do algorithms contribute to polarization, discrimination, inequality etc. in a digitalized society? What kind of bias do algorithms produce?
- iii) Machine learning methods for big data: which methods need to be developed in the social sciences and humanities to analyse large noise-afflicted data sets? Which forms of validation are suitable and which ones need to be redesigned? How do these methods scale and degrade with ill-defined problems?
- iv) Designing socio-technical systems: how can knowledge and theories from social sciences and humanities be placed in the development of socio-technical systems? How can social sciences and humanities perspectives contribute to the scientific questions in computer science?

#### Your profile:

Applicants must have a doctorate/Ph.D. or equivalent.

You hold a PhD/doctoral degree in Computer Science, Mathematics, Physics or related subjects and at least, an additional year of scientific work record. Ideally, you have knowledge in the areas of Machine Learning, Knowledge Discovery, Information Retrieval, Data/Text Mining and expertise in data-based interdisciplinary projects in the area of Web Science, Computational Social Science, Digital Humanities, Complex Systems/Network Science or Social Media Analytics. Your previous scientific work has been accepted in renowned conferences and/or journals relevant for your field.

You have responsible leadership skills, you are motivated, a good team-player and have strong communication skills. You have fluent proficiency in oral and written English.

#### Your responsibilities and responsibilities:

You will carry out research and teaching activities, including the conception and execution of courses and research projects.

Publications in competitive journals and conferences are expected. An interest in pursuing a Habilitation is advantageous.

#### What we offer:

The successful candidate will be employed as a public servant.

The position is permanent and to be filled as soon as possible.

This is a full-time position.

The salary corresponds to level A13.

RWTH Aachen University is certified as a "Family-Friendly University". We particularly welcome and encourage applications from women, disabled persons and ethnic minority groups, recognizing they are underrepresented across RWTH Aachen University. The principles of fair and open competition apply and appointments will be made on merit.

**Your contact person**

For further details, please contact

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Please send your application by July 10, 2017 to

**Prof. Dr. Markus Strohmaier**

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**Theaterplatz 14**

**52062 Aachen**

You can also send your application via email to [markus.strohmaier@humtec.rwth-aachen.de](mailto:markus.strohmaier@humtec.rwth-aachen.de). Please note, however, that communication via unencrypted e-mail poses a threat to confidentiality as it is potentially vulnerable to unauthorized access by third parties.