

**The University of Twente.**

We stand for life sciences and technology. High tech and 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 six faculties we provide more than fifty educational programmes. 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 Geo-Information Science and Earth Observation (ITC)**

of the University of Twente provides international postgraduate education, research and project services in the field of geo-information science and earth observation using remote sensing and GIS. The aim of ITC's activities is the international exchange of knowledge, focusing on capacity building and institutional development in developing countries and emerging economies.

The ITC **Department of Geo-Information Processing** addresses and studies the technological and methodological aspects of geo-information processing and infrastructure to develop technology oriented concepts for the new geo-information society and solve complex application problems.

The faculty ITC invites qualified persons to apply for the **PhD/AIO position**:

**Volunteered geographical information for public health applications**

Information and communication technologies have greatly facilitated the acquisition, online storage and exchange of large amounts of georeferenced data by non-professionals. Activities in this relatively new domain fall in the realm of Volunteered Geographical Information (VGI), as most of the data is processed by volunteers. VGI data is often highly heterogeneous and might be massive – if volunteers get organized to crowd source it for a particular citizen science project. These two characteristics have resulted in limited research efforts to derive new and/or improved geospatial products and knowledge based on VGI. However, such products and knowledge are needed to support informed decision-making and to move towards a true “information society”. This research project thus deals with the development of novel methods and tools to properly visualize and analyze VGI data. As case study, we will focus on the role of VGI data to understand the impact of global environmental changes on public health.

**The challenge**

In this research project, we propose using geovisual analytics to derive meaning from and insight in the diversity of ever increasing VGI data collections and geo-products that can support public health applications such as the mapping and modeling of the spatial and temporal distribution and seasonality of vector-borne diseases. Geovisual analytics, is a developing discipline that integrates knowledge, methods and techniques from scientific geovisualization, human-computer interaction and spatio-temporal data management and analysis. As stated above, we envisage case studies strongly linked to public health where the integration of formal (GIS layers and remote sensing products) and informal (volunteers observations) datasets is expected.

**Your profile**

This PhD/AIO position will suit a person with a Master's Degree in Geographical Information Science, in Remote Sensing or in (medical/physical) Geography. He/she should have an analytical mind, experience with programming and affinity with geovisualization as well as with quantitative GIS/RS methods (e.g. spatial data mining/machine learning and data assimilation).

**We offer**

We offer an inspiring and challenging international environment. The successful candidate will be employed for a period of four years. Salary and conditions will be in accordance with the Collective Labour Agreement (CAO) of the Dutch Universities.

**Information and application**

More information on this PhD/AIO position can be obtained from Prof. Dr. M-J. Kraak ([m.j.kraak@utwente.nl](mailto:m.j.kraak@utwente.nl)) or from Dr. R. Zurita-Milla ([r.zurita-milla@utwente.nl](mailto:r.zurita-milla@utwente.nl)). You are also invited to visit our homepage: <http://www.itc.nl>. Interested candidates are invited to send the application, detailed curriculum vitae and a letter elaborating the motivation for the application before **16 August 2013**.

Please use the application on [www.utwente.nl/vacancies](http://www.utwente.nl/vacancies) link below '**apply here**' and fill out the application form.

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