

PhD-student vacancy

LACrOSSE: Large-Scale Collaborative Search & Sensemaking

Project description

In 2011, the MOOC revolution began. Today, Massive Open Online Courses (or MOOCs) are being offered by many world-renowned universities, reaching millions of learners. Learning though is a complex process. Research endeavours have begun to investigate how to enable active learning in MOOCs, a challenging task due to the learners' diversity and the extremely skewed learner-staff ratio. These conditions make peer learning a necessity: MOOC learners learn from each other, with little intervention from instructors.

A ubiquitous part of learning is search and sensemaking: learners turn to the Web seeking additional information, and over time create mental representations of the material. In this project, we develop **collaborative search & sensemaking** (CSS) as an important activating element of MOOCs. The challenges are derived from the fact that existing works in CSS have focused on collaborations between extremely small groups of users, whereas we aim for the very opposite: explicit collaborations between large groups of learners. How to "scale up" CSS to large numbers of collaborators is the question LACrOSSE will tackle.

TU Delft is one of the largest MOOC providers in Europe whose courses have attracted more than a million learners so far. Conducting this project at TU Delft thus has the potential for significant and wide-ranging practical impact.

A more detailed breakdown of the research addressed in this project is available at: <http://chauff.github.io/2016-11-27-lacrosse/>

Requirements

We are looking for a candidate who can meet the following requirements:

- Has an MSc in Computer Science, or a closely related field
- Followed MSc courses and has research experience (e.g. at Master thesis level) in the at least some of the following areas: information retrieval, machine learning, data mining, human computer interaction, Web engineering
- Has strong modern Web technology skills
- Is a team player
- Enjoys research and is self-motivated
- Has good communication skills in English

Applying

For more information, please contact Dr. Claudia Hauff at c.hauff@tudelft.nl.

To apply, please email your application by **January 31, 2017** to Claudia Hauff with the subject [LACrOSSE].

The application should consist of the following:

- an explanation of your interest in the proposed research field;
- a Curriculum Vitae;
- copies of diplomas and other relevant certificates;
- a complete list of courses attended and corresponding grades;
- names and contact details of two references.

Conditions of employment

For the position at TU Delft we offer a full-time, fixed-term post for a period of four years. TU Delft offers a customisable compensation package, a discount for health insurance and sport memberships, and a monthly work costs contribution. Flexible work schedules can be arranged. Salary and benefits are in accordance with the Collective Labour Agreement for Dutch Universities. More information about the terms and conditions at TU Delft is available: <http://www.tudelft.nl/en/about-tu-delft/working-at-tu-delft/tu-delft-as-employer/terms-and-conditions-of-employment/>

As a PhD candidate you will be enrolled in the TU Delft Graduate School. The TU Delft Graduate School provides an inspiring research environment; an excellent team of supervisors, academic staff and a mentor; and a Doctoral Education Programme aimed at developing your transferable, discipline-related and research skills. Please visit <http://graduateschool.tudelft.nl/> for more information.

Working at TU Delft

The position is offered within the Web Information Systems group, located at the Software Technology department at TU Delft. TU Delft is a multifaceted institution offering education and carrying out research in the technical sciences at an internationally recognised level. Education, research and design are strongly oriented towards applicability. TU Delft develops technologies for future generations, focusing on sustainability, safety and economic vitality. You will work in an environment where technical sciences and society converge.

The Department of Software Technology (ST) is one of the leading Dutch departments in research and academic education in computer science, employing over 150 people. The inspiration for its research topics is largely derived from technical ICT problems in industry and society related to large-scale distributed processing, embedded systems, programming productivity, and Web-based information analysis.

The Web Information Systems group (WIS, <http://wis.ewi.tudelft.nl/>) concentrates in its research on engineering and science of the Web. The section is an internationally leading research group in Web-based systems, with WIS researchers and students striving to advance the state of the art in relevant disciplines like Web science, information retrieval, data science, Web engineering, Web data management, crowdsourcing and analytics. A part of WIS is the Lambda-Lab (<http://bit.ly/lambda-lab>): several WIS researchers working together (and with external parties) to push the boundaries of data- and technology-driven research for massive open online learning. As PhD candidate you will join the Lambda-Lab.