



The Department of Computer Sciences of the University of Salzburg is opening a fully funded *Postdoc or PhD-student* position.

Starting date: ideally **May 1st, 2019**; a later starting date may be negotiated.

The position will be filled within the European project HiDALGO - HPC and Big Data Technologies for Global Systems - which started in December 2018.

This project is being carried out by 13 partners from across 7 European countries.

The main goal of the project is to develop novel methods, algorithms and software for high-performance and big data technologies with a special focus on three pilot applications. One of these applications is the analysis of the spread of information and messages in social networks, which will be led by the Efficient Algorithms Group at the University of Salzburg. For more information on the Efficient Algorithms Group, see <https://algorithms.cosy.sbg.ac.at>.

Main Responsibilities:

- Analysis of the structure of social networks and the spread of messages therein
- Design and analysis of proper models and algorithms for the spread of information in social networks
- Participation in the design of high-performance simulation software - to be carried out in collaboration with the project partners and utilizing the results of the pilot applications

Required Qualifications:

- For candidates applying for a PhD student position, a university degree in Computer Science or related field is required
- For candidates applying at Postdoc level, a PhD or equivalent in Computer Science or related field is expected
- Good understanding of parallel and/or distributed algorithms
- Good programming skills in at least one high-level programming language such as Java/C/C++
- The ability to work in teams
- Creativity
- Good knowledge of English

Additional (Optional) Skills:

- Experience in parallel computing (simulations and applications)
- Experience in defining software interfaces and their implementation
- Conceptual thinking and solution-oriented approach to working

We Offer:

- The position is full time (40 hours/week) for three years and the level of employment is according to the Austrian collective agreement for Universities
- If the position is at the PhD student level, the candidate has the opportunity to pursue a doctoral degree
- The gross salary at the PhD student level is approximately 40.000 Euro per year.





- The gross salary at the Postdoc level is approximately 52.000 Euro per year. (Depending on experience and qualification, a higher amount may apply.)
- We offer a pleasant working atmosphere in a highly-motivated team, and the possibility of training and courses to improve personal skills.

The application deadline is **April 7th, 2019**. The application - containing an academic CV and motivation letter - should be addressed to Univ.-Prof. Dr. Robert Elsaesser, University of Salzburg, Department of Computer Sciences, Jakob-Haringer-Str. 2, 5020 Salzburg, Austria and sent by email to judith.warter@sbg.ac.at (cc: robert.elsaesser@sbg.ac.at). Please send the entire application as one PDF document with quote reference EA_002.

Female candidates are especially encouraged to apply. Full-time positions can be turned into part-time positions. People with disabilities will have priority at equal qualifications.

