

## Open PhD Candidate/Associate Researcher (m/f) Position in the Area “Data-Intensive Software Systems / Big Data”

The University of Duisburg-Essen (UDE) is one of the youngest universities in Germany, and thinks in terms of possibilities, not limitations. UDE ranks 17th in the Times Higher Education Ranking of the world's 150 best universities that were founded in the past 50 years. paluno, the Ruhr Institute for Software Technology, was founded in 2010. With seven professors and more than 100 academic staff members, paluno conducts application-oriented research in close cooperation with prominent partners from industry and research. paluno's research areas include adaptive systems, mobile computing, cloud services, cyber-physical systems and software product lines. paluno is actively involved in key European initiatives and research projects. Among others, paluno is partner of the European Technology Platform on Software, Services and Cloud (NESSI), and founding full member of the European Big Data Value Association (BDVA). paluno offers researchers a stimulating, international environment. Our offices are located in the city of Essen, the centre of a multi-cultural metropolitan area.

In the context of European research projects, the **Software Systems Engineering** research group (SSE, Prof. Dr. Klaus Pohl) at paluno studies and develops methods and techniques for engineering data-intensive systems. Nowadays, software systems have to process an increasing amount of data, which can be highly heterogeneous and partly unstructured, in real-time. Software engineers and cloud providers apply big data technology in order to address the novel challenges posed by these characteristics of data-intensive systems. The efficient analysis of large data streams holds great potential for improving the underlying business processes. Furthermore, increasing concerns regarding privacy and security of critical data have to be considered.

### Your Job

Your will get involved in one of our EU Horizon 2020 projects, where you will focus on the development and operation of data-intensive software systems. In particular, your research activities will place emphasis on one of the following areas:

- data security and privacy, e.g., in the context of cloud services for smart cars and social care;
- prediction techniques for digitized business processes in the transportation and logistics domains;
- software-based control centers for proactively adapting context-sensitive systems and cloud applications.

As part of our competent and motivated team, you will work in a fascinating, international research environment. You will prototypically implement and implement your research results in close cooperation with our industrial partners.

The position as **PhD Candidate/Associate Researcher** (salary classification TV-L 13) is initially offered for **two and a half years with the option for extension**. The position is offered as **full-time or part-time** (at least 50 % of a full-time position). It also provides the opportunity to earn a PhD degree and thus to obtain further academic qualification.

### Your Profile

You are highly interested in delving into current research questions in the area of software engineering for data-intensive applications, and developing innovative results addressing current challenges. You have recently completed or will soon complete your studies in Applied Computer Science, Computer Science, Software Engineering, Business Information Systems, Data Science, or a related area with good results within the next three months. You are creative, you enjoy working in a team, and you have remarkable analytical skills. Moreover, you like to collaborate with researchers and developers across different disciplines to develop creative solutions for complex problems.

### Your Application

We are looking forward to receiving your application. The University Duisburg-Essen aims at promoting the diversity of its members and considers aspects of competence that derive from age or origin of the applicants (see <http://www.uni-due.de/diversity/international.shtml>). Applications from disabled or equivalents according to § 2 Abs. 3 SGB IX are encouraged. The University Duisburg-Essen has been awarded for its effort to promote gender equality with the "Total-E-Quality-Award". It aims at increasing the share of women in the scientific personnel and therefore explicitly encourages women to apply. Women will be preferentially considered when equally qualified according to the state equality law.

Please address your complete application including transcripts of records with reference number **707-16** to:

Prof. Dr. Klaus Pohl, University of Duisburg-Essen, Software Systems Engineering, Gerlingstraße 16, 45127 Essen, Germany

*Attention:* Your application documents should be attached to the e-mail as a single, continuous PDF-file.

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| E-Mail | bewerbung.paluno@uni-due.de                                     | Application Deadline | February 8, 2017        |
| Web    | <a href="http://paluno.uni-due.de">http://paluno.uni-due.de</a> | Begin of Employment  | At earliest convenience |

Further questions: Prof. Dr. Klaus Pohl, Phone: (+49) 201 183-4660, E-Mail: [klaus.pohl@paluno.uni-due.de](mailto:klaus.pohl@paluno.uni-due.de)