

## Job Advertisement with the reference-number 126/2011

The Institute of Distributed Systems (IVS) of the Otto-von-Guericke-University Magdeburg seeks for applicants to fill two

### Research Assistant Positions.

The positions are granted for a period of 3 years and are open from October 1st, 2011. Salary is according to pay group E 13 TV-L.

The research focus will be on the safe co-operation of autonomous vehicles as cars and UAVs. Dependability of the distributed sensor systems and a communication middleware that adapts to the various uncertainties of dynamic cooperation will be the major research challenge. The work will be part of the research project KARYON (Kernel-based ARchitecture for safetY-critical cONtrol, FP7-ICT-2011-7) funded by the European Commission.

The positions have two related but different research objectives:

**One research topic** will concentrate on advanced concepts of fault-tolerance in a distributed sensor system comprising on-board sensors of the vehicles and remote sensor information from other vehicles and the environment for improved perception and co-operation. This will include modelling of sensor faults, self-assessment of sensors, trustworthiness estimation, and adaptive filter and fusion methods.

**The other research topic** is related to seamless and predictable communication. Work will investigate adaptive middleware concepts dealing with the heterogeneity, temporal uncertainties and complex failure modes of the communication networks. Because parts of the system will be simulated, interoperation between real and simulated components in mixed reality settings will also be explored.

### Conditions of employment:

The applicants should have a degree in computer science, computer engineering or a related area. Affinity to the research area and other relevant aspects of the curriculum vitae will be considered in the selection process.

Questions, indication of interest can be directly directed to Prof. Dr. Jörg Kaiser (E-Mail: [kaiser@ivs.cs.uni-magdeburg.de](mailto:kaiser@ivs.cs.uni-magdeburg.de))

The Otto-von-Guericke-University Magdeburg seeks to increase the share of women in research. Therefore women are particularly encouraged to apply. Handicapped applicants will be given preference in case of equal qualifications.

Applications should comprise the following information:

- Curriculum vitae (name, address, degrees, work/research experience, etc.),
- A statement (max 1 page) with the personal motivation and research interests,
- A letter of reference (optional).

Applications should be sent by indicating the **reference-number 126/2011** before **September 10, 2011** to:

**Otto-von-Guericke-Universität Magdeburg**  
**Dezernat Personalwesen**  
**Postfach 4120, 39016 Magdeburg**

We point out that we will not be able to refund any costs for a personal interview (travel) and will sent back the application materials only in case the applicant includes a return envelope.