Ph.D. position
Real-time generation of stereoscopic views from intraoperatively recorded 3D data sets.

Job description: Your project addresses a fundamental technology step towards the development and evaluation of fully digitized visualization systems for microsurgical applications.

Your task is to specify and to develop an embedded HW/SW architecture optimized for the segmentation of relevant anatomical structures from a 3D data set and for the generation of virtual stereoscopic views on said structures in a real-time video mode. Appropriate algorithms for fast data processing and segmentation have to be developed and implemented. Special requirements on reliability and safety of medical devices need to be taken into account.

Qualification: You are an engineer / scientist excited about designing embedded systems for real-time application. You hold a top-grade master's degree and you are driven by a pronounced interest in medical applications. Ideally you have first experiences in OCT, in optoelectronics or in digital camera development. You are willing to contribute to a newly established research team and to work in close collaboration with industrial research departments.

Salary: The remuneration occurs on the basis of the wage agreement of the civil service in TV-L.

Institute: Institute of Biomedical Technology (IBT).
Department of Optoelectronic Systems in Medicine and Life Sciences

Contract duration: Limited, 3 years

Starting date: 01.04.2016
Application up to: 15.03.2016

Contact person in line-management: For further information please contact Prof. Dr. Werner Nahm, e-mail: werner.nahm@kit.edu, Tel.: 0160 90470367

Application: Please send your application in written form or by e-mail to

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KIT is an equal opportunity employer. Women are especially encouraged to apply. Applicants with disabilities will be preferentially considered if equally qualified.