

informatik-Kolloquium

Der Fachbereich Informatik der Johannes Kepler Universität Linz¹ lädt in Zusammenarbeit mit der Österreichischen Gesellschaft für Informatik (ÖGI) zu folgendem Vortrag ein:

Topic: Medical Visualization: Visualizing the Invisible

Presenter: Prof. Noeska Smit, University of Bergen

Date: June 19th, 2019, 16:00 CET

**Location: Johannes Kepler University Linz,
Science Park Building 3, Room 063**

Abstract: In the field of medicine, there has been a tremendous growth in the amount of medical imaging data that is acquired, such as computed tomography (CT) or magnetic resonance imaging (MRI) scans. In medical visualization, computer-based interactive visual representations of such data are made, often aiming at improved diagnosis, treatment planning, treatment guidance, and/or doctor-patient communication. At times, there are structures that are not visible in the original medical imaging scans. When these invisible structures are nerves, and they are at risk for damage during surgery, visualizing these invisible structures can be crucial to avoid such damage. In this talk, I will present an overview of my research in this area, aiming at enhancing medical imaging data by integrating information from various sources into a combined interactive visual representation for educational, clinical, and research purposes.

Short Bio: Noeska Smit is an Associate Professor in Medical Visualization in the Visualization Group at the Department of Informatics, University of Bergen, Norway. She is also affiliated to the Mohn Medical Imaging and Visualization Centre at the Department of Radiology, Haukeland University Hospital, where she holds a position as a Senior Researcher. Her research interests include model-based visualization for surgical planning and education, as well as interactive visualization of multi-modal medical imaging data. She received the Dirk Bartz Prize for Visual Computing in Medicine (Eurographics Medical Prize) in 2019. Dr. Smit received her PhD from Delft University of Technology in the Netherlands.

¹ Der Fachbereich (<http://informatik.jku.at>) besteht aus folgenden Instituten: Application Oriented Knowledge Processing (FAW), Bioinformatics, Computational Perception, Computer Architecture, Applied Systems Research and Statistics, Computer Graphics, Formal Models and Verification, Networks and Security, Integrated Circuits, Pervasive Computing, Software Systems Engineering, System Software, Telecooperation, Signal Processing

Einladender: Univ.-Prof. Dr Marc Streit, Institute of Computer Graphics

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