



University
of Basel

Department of
Biomedical Engineering



Selected research topics in Biomedical Engineering:

Robot- & Computer-Assisted Surgery

Location: DBE, Hegenheimermattweg 167B, Lecture Hall 02.097

Date & Time: Wednesday 01.11.2023 13:15 – 15:00

AI in Personalized Surgery: Adapting to Patients and to Surgical Teams

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Abstract

Artificial Intelligence (AI) offers the potential to tailor surgical procedures to the individual patient. However, this is just the tip of the ice-berg: Surgery is a diverse field and to leverage the full potential of AI, the aim should be the development of intelligent assistance tools that can adapt not only to the patient but also to the individual needs of the surgical team. We will discuss the technical challenges of this vision and how to overcome them.

Biosketch

Jannis Hagenah leads the research on Surgical AI at Fraunhofer IMTE in Lübeck. Before that, he worked at the University of Oxford in the group of Prof. David Clifton on continual machine learning in medicine. He holds a PhD in computer science as well as a masters in medical engineering science, both from University of Lübeck. He is a lecturer at the London Metropolitan University and at the University of Applied Sciences Vienna and serves in the board of the MIDL Foundation, the German Chapter of IEEE EMBS as well as the German Society for Biomedical Engineering (DGBMT).