

## Multimodal Interaction in Surgical Applications and Beyond

Monday, 15.05.2023, 10:00, ZT702

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Technological advancements such as 3D visualizations, virtual reality and similar technologies have the potential to improve work-life in many areas. My talk 'Multimodal Interaction in Surgical Applications and Beyond' will present various research works that focus on supporting and empowering surgeons in diverse settings, such as surgery planning or performing an intervention. My research introduces surgeons to tangibles, 3D models, virtual reality, gesture control, electroluminescence displays and new kinds of navigational feedback. We integrate these technologies into applications to empower surgeons rather than restrict or replace them. But not just surgeons can profit from intuitive systems incorporating a multimodal interaction. We handed the same technologies - virtual reality and tangibles - to directors of theatre productions or movies and observed a feeling of empowerment as it enabled them to communicate their vision independently.



**Invited Talk**