

Plenary Talk

PV XII Thu 9:00 AudiMax

AI in the context of medical images — ●STEFAN WESARG —
Fraunhofer Institute for Computer Graphics Research IGD, Darmstadt, Germany

AI is transforming how medical image data is used for diagnosis and therapy of diseases. Most prominently, it can help in uncovering complex patterns in radiology that exceed human perception or speed up the analysis of such data. Current machine learning approaches will

be covered by focussing on their applications to medical image data. This includes diagnosis, disease monitoring, and early detection. Key themes include methods for organ and lesion segmentation, analysis of multimodal imaging data, and integrating image-based features with clinical information to create robust decision-support systems. The abstract also addresses AI-driven prosthetics development based on image data. Finally, we will outline challenges such as generalization and implementation in real-world workflows.