

Sandy Engelhardt, Ph.D., is an Assistant Professor at Heidelberg University Hospital and leads the Working Group "Artificial Intelligence in Cardiovascular Medicine". Her dissertation "Computer-assisted Quantitative Mitral Valve Surgery" won the BVM-Award 2017 for the best PhD thesis in the German Image Processing Community.

The goal of her newly established working group is to leverage methods from the field of Artificial Intelligence for the analysis of heterogenous data collected from patients with cardiovascular diseases. The group especially focuses on exploiting the potential of multimodal time-resolved cardiac images, such as Echocardiography, MRI, CT and Endoscopy for objective decision support in diagnosis and treatment. Beyond that, we continuously work in the direction of increasing the safety of surgical and interventional cardiovascular procedures. For example, building customized surgical training modules and intraoperative assistance systems are an integral part of our research topics. It is our strong belief that research can only thrive through collaboration, hence we follow a translational approach and work very closely together with clinical partners. This enables us to address highly relevant clinical questions at the interface of cardiac surgery, cardiac intervention and cardiology.