

## **Ivana Išgum**

### **Short Biography:**

Ivana Išgum is a Distinguished Professor in AI and Medical Imaging at the Amsterdam UMC and University of Amsterdam. She leads Quantitative Healthcare Analysis (qurAI) group, an interfaculty research group embedded in Faculties of Medicine and Science. Her current research aims at enhancing patient care by designing and enabling leading-edge AI technologies in healthcare, especially in the fields of radiology and cardiology.

### **Abstract:**

Multimodality imaging is important in detection, diagnosis and treatment of cardiovascular disease. However, automated AI-based image analysis methods have been often developed for extraction of information from single modality data. While the independently extracted information from different images can be subsequently merged for decision-making, joint analysis of images from different modalities may better exploit complimentary information from the available data. Nevertheless, combining or integrating information from multiple images with different characteristics may pose multiple challenges. In this presentation, opportunities and challenges of deep learning and machine learning approaches for analysis of CT, PET/CT and SPECT/CT for detection and quantification of cardiovascular disease and prediction of its outcome will be reviewed.