



Master Thesis (6M)

In collaboration with Waveye

Thesis title	Human Motion Capture for Humanoid Teleoperation Using 4D Imaging Radar
Thesis description	<p>Teaching humanoid robots' new tasks quickly and safely is one of the next major frontiers in robotics. This thesis will focus on radar-based motion capture techniques to accelerate the training of humanoid robots. The project involves exploring novel imitation-learning approaches that map radar observations of human motion to whole-body robot behavior and validating these methods on a real humanoid platform.</p> <p>This project offers a unique opportunity to work with advanced radar sensors and a real humanoid robot, contributing to the next generation of robust teleoperation systems.</p>
Qualifications	<ul style="list-style-type: none">• Strong background in machine learning, signal processing, and robotics• Experience with Python, PyTorch, and ROS / ROS 2• Familiarity with robot kinematics, and whole-body control• Independent, hands-on, and analytically minded working style
Begin	According to agreement
Duration	6M for Master thesis
Language	English
Supervisor	Waveye + ISS

Please contact Prof. Bin Yang (bin.yang@iss.uni-stuttgart.de) by email together with your Master transcript.

07.11.2025