

In the envisioned future factory setups, humans and robots will share the same workspace and perform object manipulation tasks jointly. The traditional approach is to let the robot be a passive agent in the interaction while the human agent controls the motion of the object. The main objective in the FACT project is to study novel methods for learning and encoding tasks from multiple demonstrations and to make use of explicit communication (natural language) as well as implicit communication (motion). The end-goal of the 5-year project is to build a system that is beyond the state-of-the-art in the areas of object handling and manipulation; human activity detection; learning by interaction; multimodal human-robot interaction; and human aware navigation.



Human-Robot interaction using augmented reality



Dual arm robot on a mobile base



Gaze and pointing for grounding in furniture assembly



Mutual gaze and joint attention in collaborative food assembly