

**Date:** Wednesday October 27

**Time:** 10:10-11:00

**Location:** Nano Building 51, seminar room 015

**Speaker:** Dr. Nicolás Navarro-Guerrero, Research Group Leader, Leibniz Universität Hannover

**Title:** Towards Dexterous Manipulation: From Teleoperation to Autonomous Learning

**Abstract:** The object perception capabilities of humans are impressive, and this becomes even more evident when trying to develop solutions with similar proficiency in autonomous robots. While there have been notable advancements in technologies for artificial vision and touch, the effective integration of these two sensory modalities in robotic applications still needs improvement, and several open challenges remain. This talk summarizes the current state of the art in visuo-haptic object perception for robots, identifies open challenges, and presents some of my ongoing research in the area.

**Bio:** Nicolás Navarro-Guerrero is a roboticist specializing in the cognitive and AI aspects of robotics, focusing on human-centered robotics. His interest lies in understanding cognitive processes and their application to developing increasingly autonomous and safer interactive intelligent systems for industrial and assistive purposes. He studied Electronic Engineering at the Universidad Técnica Federico Santa María, Valparaíso, Chile. In 2016, he completed a Ph.D. in Computer Science at the University of Hamburg (Germany). For more information, visit his webpage: <https://nicolas-navarro-guerrero.github.io>