



The
University
Of
Sheffield.

Automatic
Control and
Systems
Engineering

The Department of Automatic Control & Systems Engineering
is pleased to announce the following seminar:

Skin Sensors and Safe Actuation for Human Symbiotic Robots

Dr Alexander Schmitz
*Associate Professor,
Sugano Lab, Waseda University,
Japan*

Wednesday, 13 May 2020 at 14:00
Via Google Meet

Host Academic: Dr Shuhei Miyashita, Lecturer in ACSE

Abstract

My talk will have 4 parts:

1. History of robots in Waseda University.
2. Intrinsically safe actuators developed in my group: safe, compact, excellent position control, backdrivable, force control.
3. Tactile sensors developed in my group: distributed 3-axis sensing in soft skin
4. Tactile learning, i.e. tactile object recognition and in-hand manipulation

Biography

Alexander Schmitz is an Associate Professor (without tenure) at the Sugano Lab, Waseda University, Japan. He is also one of the founders of www.xelarobotics.com, which sells tactile sensors. He received his master's degree with honors from the University of Vienna, Austria, in 2007, and PhD degree from the University of Sheffield, England in 2011. He performed his PhD research as part of a joint location program with the Italian Institute of Technology, Italy. His research interests include tactile sensing, intrinsically safe actuation, human symbiotic robotics, and robotic object handling. He has applied for 11 patents. He has received a grant of 117 million JPY from the JST START Program in 2016.