GVLAB Seminar

Prof. Lorenzo Jamone
Queen Mary University London, UK

The intelligence of the hand

The robots of today are mainly employed in heavy manufacturing industries (e.g. automotive) to perform simple and repetitive tasks in very structured environments. The robots of the future will be different. They will perform more complex tasks in less structured environments, even in collaboration with humans. To do so, they will need to use their hands (almost) as smartly as humans do, which is a tremendous challenge! How will this be achieved? Explicit insights from biology and psychology, well established control and engineering principles, modern AI techniques, have to be combined and properly integrated. In the talk I will briefly summarize my 20-years research journey in the area of Cognitive Robotics (with the twofold objective of taking inspiration from humans to realize better robotic systems, and at the same time understanding more about human intelligence), with a focus on "the intelligence of the hand": tactile exploration and manipulation of objects, but also communication and interaction, in both humans and robots.

October 24th 2024
10:30-11:30
Hybrid: UT Hongo Campus
Eng. Bld 2 room 232

skype

Lorenzo Jamone is a Senior Lecturer (Associate Professor) in Robotics at the School of Engineering and Materials Science of the Queen Mary University of London (UK). He is part of ARQ (Advanced Robotics at Queen Mary) and he is the founder and director of the CRISP group: Cognitive Robotics and Intelligent Systems for the People. He is the Chair of the IEEE Technical Committee of Cognitive and Developmental Systems. He received the MS degree (honours) in computer engineering from the University of Genoa, Genoa, Italy, in 2006, and the PhD degree in humanoid technologies from the University of Genoa (Italy), and the Italian Institute of Technology, in 2010. He was an Associate Researcher at the Takanishi Laboratory, Waseda University (Tokyo, Japan) from 2010 to 2012, and at the Computer and Robot Vision Laboratory, Instituto Superior Técnico (Lisbon, Portugal) from 2012 to 2016. He has over 100 publications with an H-index of 29. His research interests include cognitive robotics, robot learning, robotic manipulation, tactile sensing.

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