

14th Seminar by Physiological Anthropology Research Center

- Date : 14 March 2023, 13:15~14:15 (Register 12:45~)
- Venue : Design Common, Ohashi Campus, Kyushu University and Online (Hybrid)
※Please register yourself via the online registration link provided below.
- Speaker : Dr. Giacinto Barresi
Researcher & Project Coordinator, Rehab Technologies Lab
ISTITUTO ITALIANO DI TECNOLOGIA
<https://rehab.iit.it/>
- Fee : Free
- Organizer : Physiological Anthropology Research Center (PARC), Kyushu University
- Title : Virtuality in Biomedical Robotics
- Language : English
- Abstract : Virtual items can be designed to enhance human-robot interactions in biomedical contexts for surgical, rehabilitative, prosthetic, and assistive applications. Indeed, they can literally augment interactions, providing the user with intuitive modalities of stimulation and control in order to improve the individual experience, well-being, and safety alongside the system performance. Accordingly, solutions of extended (virtual, augmented, mixed) reality (representing all possible combinations of digital and real items) can be used to empower the communication between human and machine. For instance, they can enhance the training of clinicians and patients in using robotic devices, engaging users in complex and repetitive exercises, making them feel autonomous, and enabling a precise and accurate control of mechatronic systems. Furthermore, they can work as replicas of human-robot systems within digital twins (and phygital twins?) for improving their physical counterpart - possibly constituting the building blocks of a "metalaboratory" for human-centered robotics in healthcare. This talk will present and discuss the opportunity of adding digital layers between humans and robots in biomedical applications according to the perspectives of cognitive ergonomics and neuroergonomics.

Registration: Please register before March 13 if you wish to attend online.
Zoom meeting information will circulate before the seminar.
URL: <https://forms.gle/m8nuyNWt8DKqsZg48>



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