Symposium

Thu. Sep 25, 2025 4:25 PM - 5:55 PM JST | Thu. Sep 25, 2025 7:25 AM - 8:55 AM UTC Session Room 4 (Large Hall B)

[Symposium 17] The development of robot and AI Agent System to improv Social Skills for Individuals with Autism Spectrum Disorder

Moderator: Yasuhiro Kanakogi (Graduate School of Human Sciences / School of Human Sciences Osaka University), Jerome Dinet (University of Lorraine | UdL · Faculty of Psychology)

[SY-17]

The development of robot and AI Agent System to improv Social Skills for Individuals with Autism Spectrum Disorder

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Social skills refer to the ability to interact and communicate with others in a given social context to establish and maintain positive relationships. Teaching a child with autism spectrum disorder (ASD) social skills can sometimes be challenging. This is mainly because one of the key characteristics of ASD is a delay or lack of social and communication skills. Although there are few evidence-based interventions effective for individuals with ASD, there remains a critical need to develop novel and effective support tools and therapeutic intervention strategies specifically tailored for these individuals. Recent advances in technology, particularly in robotics and artificial intelligence (AI) agent system, have been remarkable. Innovations such as voice recognition systems and dialogue generation systems have enabled robots to perform a variety of human-like functions, prompting researchers to explore the potential of these technologies in developing and validating robotic interventions for children with ASD. In fact, some researchers have argued that robotic applications can be effectively harnessed to provide innovative clinical treatments for children with ASD, as many children with ASD have shown a higher level of task engagement when interacting with robots compared to human adults. Indeed, growing anecdotal evidence suggests that the use of robots offers unique opportunities to assist children with ASD. The types of robots used for such interactions have been carefully considered, with simple and animal-like robots being favored for their ease of use and the engaging nature of the interactions. Android robots, on the other hand, offer the potential for more generalized applications in daily life. It is essential to consider the best fit between robots and users to maximize the potential of robotic interventions. In this symposium, we will discuss the possibility that individuals with ASD can learn social skills by interacting with robots and AI agent systems.