

Humanoid Robots for Therapeutic Treatment of Autism Spectrum Disorder (ASD) Children

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NEED – Current clinical practice in the treatment of children with ASD calls for behavioral treatment in order to improve social, communication and cognitive skills of children. But the children have difficulties to relate to their therapists and to other kids.

SOLUTION – Therapies can be enhanced with interactive humanoid robots (Figs. 1 and 2), to increase the effectiveness of treatment and the transfer of skills to everyday life environments.

PROJECT – Development and evaluation of a low-cost humanoid robot, supported by multimedia materials for mobiles and tablets, allowing interaction between therapist and children during a treatment session.



Fig. 1 – Therapy session with robot at Manises Hospital



Fig. 2 – Other robots used for therapy with autistic children: Romibo (left) and Kaspar (right)