

ChARMin – an active arm robot for children



An intensive rehabilitation training of the arm is important for children with motor impairments. Rehabilitation robots can be used for adult patients to provide this intensive training and, furthermore, to assist, enhance and assess neurorehabilitation. However, there is currently no active arm robot that was specifically built for the pediatric target group. Therefore, we are developing ChARMin, an active exoskeleton for arm rehabilitation. To increase motivation and to promote an active participation of the child during therapy, we develop different game-based virtual reality scenarios and patient-cooperative control strategies and test them on the new platform. In parallel, robot-assisted outcome assessments are being implemented to measure the arm range of motion, joint torques and the quality of the arm movements.

Project onset

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Project members

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Cooperating partner

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