

## Measurement and Analysis of Human Hand Kinematics

**Authors :** Tamara Grujic, Mirjana Bonkovic

**Abstract :** Measurements and quantitative analysis of kinematic parameters of human hand movements have an important role in different areas such as hand function rehabilitation, modeling of multi-digits robotic hands, and the development of machine-man interfaces. In this paper the assessment and evaluation of the reach-to-grasp movement by using computerized and robot-assisted method is described. Experiment involved the measurements of hand positions of seven healthy subjects during grasping three objects of different shapes and sizes. Results showed that three dominant phases of reach-to-grasp movements could be clearly identified.

**Keywords :** human hand, kinematics, measurement and analysis, reach-to-grasp movement

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