「人とインタラクションの未来」
2018 年度採択研究者

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剛性フィードバックでの運動のトランスファーと向上

§1. 研究成果の概要

In FY2018, the project has focused on the development of a new methodology to estimate the endpoint stiffness of the arm during rapid movements. Ultimately, the power grasp force was determined to provide the best compromise between spatial and temporal resolution. An experiment was carried out with 10 subjects at the Tokyo Institute of Technology using a robotic interface and a grasp force sensor to measure the changes in grasp force during reaching tasks. Two experiments were tested where subjects had to increase movement precision to facilitate task success. The results from these experiments show that grasp force is correlated with movement precision.
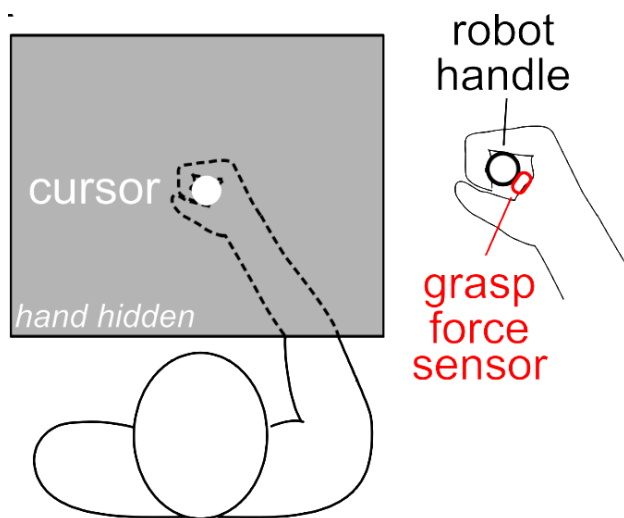
A manuscript that describes the above results is in preparation for publication.

§2. 研究実施体制

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②研究項目

・Analyzing the grasp force during reaching movements.

・Preparation of a new robotic interface for human-human experiments.

・Writing and revising a manuscript for publication in a peer-reviewed international journal.