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Understanding the ideal cooperative characteristic between two humans

Abstract

Observing current lifestyles and human growth performance in these past decades we can make a deduction that human workforce going to be reduced until a serious level. We believed that in critical field such as health industries, robots that cooperated with human to handle human patient will provide the help needed to fill the gap. In order to design human cooperative robot that will be able to act and react with human-like features so that the robot can replace the human counterparts, we need to understand how human communicates with human first. This paper discussed the ideal characteristic of how two humans cooperate to complete a cooperative task. The cooperative task experiment involved carrying experiment object in several direction and varying the information available to the experiment subjects. We calculated the smoothness during the cooperative task to understand the ideal cooperative characteristic between two humans.

Keywords — Collaborative works, human factors, motion analysis