

## Hand Controlled Mobile Robot Applied in Virtual Environment

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**Abstract :** By the development of IT systems, human-computer interaction is also developing even faster and newer communication methods become available in human-machine interaction. In this article, the application of a hand gesture controlled human-computer interface is being introduced through the example of a mobile robot. The control of the mobile robot is implemented in a realistic virtual environment that is advantageous regarding the aspect of different tests, parallel examinations, so the purchase of expensive equipment is unnecessary. The usability of the implemented hand gesture control has been evaluated by test subjects. According to the opinion of the testing subjects, the system can be well used, and its application would be recommended on other application fields too.

**Keywords :** human-machine interface (HCI), mobile robot, hand control, virtual environment

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