

## システム情報工学研究科修士論文概要

年 度	平成 23 年度	学位名	修士(工学 )
専 攻	知能機能システム	専攻	著者氏名
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論文題目			
Design and Implementation of Control System for an Omni-Directional Mobile Robot with Three Active Caster Wheels (三つのアクティブキャスター車輪を用いた全方向移動ロボットの制御システムの設計と実装)			
論文概要			
<p>This research aims to the development of the control system of an Omni-Directional Mobile Robot(ODMR) with three active caster type wheels. In this paper, the author started with reviewing the previous work which have been done on those kinds of robots then conveying to analyze the mechanism and kinematics of the Omni-Directional Mobile Robot which is designed by Intelligent Robotics Laboratory - University of Tsukuba. Afterwards, the author has proposed and done two calibrations on the robot wheels for improving its localization followed by substantiation experiments. Then, a motion design of the robot has been proposed by the author as an essential step to build a complete control system of this Omni-Directional Mobile Robot. The experimental results of point-to-point movement are also shown.</p>			
審査日 平成 24 年 01 月 31 日			
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