

DIVERSITY AND INTELLIGENCE IN MULTI-ROBOT TEAMS

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Abstract: This research proposes new tools for investigation of behavioral diversity in multi-robot systems and a significant body of results using these tools in simulated and real mobile robot experiments. The experiments specifically describe a framework of defining behavior-based strategies for multi-robot tasks as robot foraging, robot soccer and robot formation. The research focuses specifically on motor schema-based multi-robot systems, which are an important example of behavior-based control..

Keywords: mobile robots, multi-agent teams, finite state machines, cooperation in multi-agent teams

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