## HEURISTIC ACTION PLANNING ALGORITHM FOR DISTRIBUTED MULTIAGENT SYSTEMS

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Abstract: In this paper an approach of modelling multiagent action planning and task execution problems is discussed. The distributed multiagent system taken in consideration is a system of m autonomous agents. Agents are constantly communicating and collaborating in order to participate in coordinating and deciding upon their actions. A heuristic action planning algorithm (HAPA) is presented for solving multiagent action planning and task allocation. Agents are given tasks in a simplified blocks world to recreate represented structures. By utilizing the planning algorithm and through interaction agents are allocated tasks which they execute to reassemble the given form.

Key words: Distributed multiagent systems, autonomous planning,