Preface

Recently, there has been a growing interest in multiagent path planning (MAPF). The problem is to compute a path for each agent from an initial to a goal location without conflicting with other agents, often aiming to minimize a cost function, such as elapsed time or throughput. Applications include vehicle fleet coordination, computer games, robotics, and various military scenarios.

Some researchers have worked at a theoretical level, while others implemented solvers to specific applications. Thus, related papers have appeared in multiple venues, including AIJ, JAIR, AAAI, IJCAI, ICRA, IROS, ICAPS and SoCS. Consequently, similar concepts were developed in different subcommunities, using varying terminology. This workshop is intended to bring together, for the first time, researchers working on multiagent path planning from different communities.

The main goals of the workshop are as follows: (1) Familiarize researchers from different areas with the varying contributions on this problem. (2) Standardize terminology and develop a taxonomy for different variants. (3) Present the state-of-the-art and discuss open challenges. (4) Encourage collaboration between participants.

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