Using Cooperation without Communication in a Multi-Agent Unpredictable Dynamic Real-Time Environment

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Abstract : This paper discusses the use of cooperation without communication in a multi-agent, unpredictable, dynamic, real-time environment. The architecture of the Persian Gulf agent consists of three layers: Fixed rule, low level, and high level layers, allowing for cooperation without direct communication. A scenario is presented to each agent in the form of a file, specifying each player's role and actions in the game. The scenario helps in cases of miscommunication, improving team performance. Cooperation without communication enhances reliability and coordination among agents, leading to better results in challenging situations.

Keywords : multi-agent systems, communication, Robocop, software engineering
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