Multi-Agent TeleRobotic Security Control System: Requirements Definitions of Multi-Agent System Using The Behavioral Patterns Analysis (BPA) Approach

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Abstract : This paper illustrates the event-oriented Behavioral Pattern Analysis (BPA) modeling approach in developing an Multi-Agent TeleRobotic Security Control System (MTSCS). The event defined in BPA is a real-life conceptual entity that is unrelated to any implementation. The major contributions of this research are the Behavioral Pattern Analysis (BPA) modeling methodology, and the development of an interactive software tool (DECISION), which is based on a combination of the Analytic Hierarchy Process (AHP) and the ELECTRE Multi-Criteria Decision Making (MCDM) methods.