An Overview of Crowd Evacuation Simulation

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ABSTRACT

Emergency scenarios is an unforeseen situation that thereated human life. Emergency action plans comprising crowd evacuation is essential to prevent the occurrence of human injury and death. Therefore, this paper proposed a crowd evacuation simulation model to provide an effective and realistic approach in dealing with evacuation procedure during fire in a building. In order to build a reliable simulation model, this paper focuses on exploring the characteristics and significance of existing simulation models and techniques from the literature. Combination of Social Force Model (SFM) and Agent Based Simulation (ABS) technique has been choosen as the solution to realistically model fire emergency evacuation scenario. The proactive and independent characteristics of agents in both approaches will contributes to the good representation of actual fire scenarios in the crowd evacuation simulation.

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