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## **Crowd Pressure - Simulating Pedestrians' Motion in Different Scenarios Basing On Modified Social Force Model**

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A model created by Helbing, Farkas and Vicsek in the beginning of 21st century considers each agent in pedestrian movement as separate individual who obeys Newton's laws. The model has been implemented and simulated by numbers of different authors who proved its reliability through realism of agents' behaviour. To describe the motion as accurately as possible, many of them modified it by presenting their own approach of used formulas and parameters. In this work, authors consider combination of various model modifications as well as present adequate factors values, which allows to observe correct, consistent simulation of different evacuation scenarios and to track changes of Crowd Pressure in subsequent stages of visualization, depending on used exit design.

**Keywords:** Crowd Pressure, Social Force Model, Pedestrian Dynamics.