

عنوان مقاله:

Calibrating Social force model based on design experiments method

محل انتشار:

سیزدهمین کنفرانس بین المللی مهندسی حمل و نقل و ترافیک (سال: 1392)

تعداد صفحات اصل مقاله: 18

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خلاصه مقاله:

Walking is one of the most important topics that has been the center of attention and focus of urban planners due to many problems such as air pollution and traffic jam. However, an efficient plan needs a complete knowledge of the movement style and the behavior of the pedestrians. Using mathematic equations and simulation, Pedestrian dynamic modeling will eliminate these needs. One of the most applicable models is the social force model for which this study tries to propose a new method for its calibration. This method is based on Statistical Design of Experiments that the optimization and the estimation of the parameters of the model will be performed. Above all, in this study the number of surrounding pedestrian affecting the intended pedestrian in the calibration process and the optimized value of it for the intended facilities are estimated.

کلمات کلیدی:

Pedestrian modeling, social force model, calibration, design experiment

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<https://civilica.com/doc/259605>

