

A STUDY ON BEHAVIOR MODELING OF PEDESTRIAN

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Abstract:

It is important to understand how people act in urban areas in order to design any social and economic systems. In this paper we focus on the spacial phase of peoples act, in other word, how they move around. The need to comprehend the way in which people move through urban areas leads to the desire to predict their movement, such as an assessment of impacts of new policy or an identification of the optimum location for a new shop. This paper describes an agent-based behavior model which is intended as the rough framework of such predictive models. The model suggested here is based on some analysis of survey data sets, including real trajectories, mental process and viewing fields of pedestrians. Pedestrian movement is influenced by many factors such as configuration and the location of attractions, previous knowledge of the place, quality and quantity of the information they acquire and so on. The model was examined by multi agent-based simulation, which is well suited to integrating these parameters. The result of the simulation shows the effectiveness of our model with some ideas for further development.