

10<sup>th</sup> March

Year 1 research design

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An Integrated Simulation model of Pedestrian movements: The Outline of the model and measurement systems

This presentation shows the plan of the PhD project on modeling pedestrian behavior in urban centres. Estimations of how people move around is important not only in understanding the way in which town centres work, but also in improving design and assessment of urban environment. My primary goal is to develop a multi-agent-based simulation model of pedestrian behavior which incorporates traditional transportation behavior models such as spatial interaction / discrete choice models, and more fine scale considerations which relate to obstacle avoidance, flocking and crowding. As it is essential to detect people's movement with high positioning accuracy both in modeling or validation process, this talk includes an overview of current local remote sensing technologies as well as an outline of research proposal.