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Abstract : Crowd simulation, through the generation of realistic pedestrian ows and densities, has a great potential as a validation tool for urban planning or design of public buildings. In macroscopic simulations approaches, agents are modelled such as their behaviour mimics human's one in similar situations. As a consequence, realistic macroscopic phenomena are expected to emerge from the sum of all agents decisions. When performing an intended activity, people decisions and behaviour mainly consist in scheduling tasks that compose this activity, planning paths between locations where these tasks should be performed, navigating along the planned paths and performing the scheduled tasks. In this paper, we focus on the task scheduling process. This task scheduling process aims at selecting where, when and in which order several tasks, representing the intended activity, should be performed. The proposed model handles spatial and temporal constraints relating to the environment and to the agent itself. Personal preferences, characterizing the agent, are also taken into account. Produced task schedules are optimized on the long term and exhibit adequate choices of locations and times with respect to the agent intended activity and its environment. We conducted an experiment that shows that our algorithm produces task schedules which are representative of human's ones. Once computed, these task schedules are relaxed and used to drive a microscopic crowd simulation in which observable ows of pedestrians emerge from the scheduled individual activities. Such simulations are easy to produce and do not require the use of a complex decisional model.