

F Lamarche, and S Donikian (2004). Crowds of Virtual Humans : a New Approach for Real Time Navigation in Complex and Structured Environments . Computer Graphics Forum (Proc. of Eurographics 2004) 3(23).

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**Abstract:** The navigation activity is an every day practice for any human being capable of locomotion. Our objective in this work is to reproduce this crucial human activity inside virtual environments. Putting together the high complexity of a realistic environment such as a city, a big amount of virtual humans and the real-time constraint requires to optimize each aspect of the animation process. In this paper, we present a suitable topological structuring of the geometric environment to allow fast path finding as well as an efficient reactive navigation algorithm for virtual humans evolving inside a crowd.

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