## Performance Analysis of WiMedia UWB System with Wireless Video Traffic

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Abstract— Using Markov chain model we propose a queueing model to analyze the performance of WiMedia system with frame aggregation of video traffic. Then we propose an analytic method to find the solution of the queueing model. To validate the proposed method, we compare the simulation result and the analytic solution in the average throughput, the mean delay, and the frame loss rate.

Keyword— Performance analysis, UWB, Gigabit, Wireless, Video.



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