

## Automatic Queuing Model Applications

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**Abstract :** Queuing, in medical system is the process of moving patients in a specific sequence to a specific service according to the patients' nature of illness. The term scheduling stands for the process of computing a schedule. This may be done by a queuing based scheduler. This paper focuses on the medical consultancy system, the different queuing algorithms that are used in healthcare system to serve the patients, and the average waiting time. The aim of this paper is to build automatic queuing system for organizing the medical queuing system that can analyses the queue status and take decision which patient to serve. The new queuing architecture model can switch between different scheduling algorithms according to the testing results and the factor of the average waiting time. The main innovation of this work concerns the modeling of the average waiting time is taken into processing, in addition with the process of switching to the scheduling algorithm that gives the best average waiting time.

**Keywords :** queuing systems, queuing system models, scheduling algorithms, patients

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