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A Mobile-Based Patient Surgical Appointment System Using Fuzzy Logic

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Abstract

The advent of artificial intelligence in medical field is playing a significant role in improving healthcare services. In healthcare, there is always need for an intelligent method to schedule resources and patients in order to reduce patient waiting time. The treatment process of patients from their arrival to the starting time of consultation is accompanied by uncertainties. Therefore, this study developed a fuzzy and a mobile-based solution for patient surgical appointment system based on some relevant input variables. The proposed system was simulated using MATLAB fuzzy inference system with a triangular member function. The range of the fuzzy inputs was then fed into the developed mobile-based application for an optimal patient surgical appointment system. The evaluation findings revealed that the proposed framework is efficient in terms of scheduling patient surgical consultations.

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