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Knowledge Engineering Based Smart Healthcare Solution

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Abstract : In the past decade, smart healthcare systems have been on an ascendant drift, especially with the evolution of hospitals and their increasing reliance on bioinformatics and software specializing in healthcare. Doctors have become reliant on technology more than ever, something that in the past would have been looked down upon, as technology has become imperative in reducing overall costs and improving the quality of patient care. With patient-doctor interactions becoming more necessary and more complicated than ever, systems must be developed while taking into account costs, patient comfort, and patient data, among other things. In this work, we proposed a smart hospital bed, which mixes the complexity and big data usage of traditional healthcare systems with the comfort found in soft beds while taking certain concerns like data confidentiality, security, and maintaining SLA agreements, etc. into account. This research work potentially provides users, namely patients and doctors, with a seamless interaction with to their respective nurses, as well as faster access to up-to-date personal data, including prescriptions and severity of the condition in contrast to the previous research in the area where there is lack of consideration of such provisions.

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