NLP and Artificial Intelligence Techniques used in Structuring Medical Texts

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Abstract

Information and medical data are both structured and unstructured. Most structured information is available in English. Various databases with structured information have been created and are easily included in medical applications or used by physicians to provide effective treatment for patients. Many researchers have begun developing algorithms or using new technologies to create the largest possible structured information. Structured information is easier to read and requires less time to be found. The researchers also seek to extract important data from various documents in specific areas or build for physicians structured databases with the extracted information. In this age of technology, we are confronted with a great deal of medical information coming from different sources. For physicians to have access to this ocean of information, structuring and compaction are needed. In the literature are a lot of papers that propose the structuring and use of medical information from clinical texts or other sources. In this paper, we present recent research in the field of medical text structuring. There are many articles that deal with structuring medical texts to extract relevant information about medical data that can be used later in medical applications to help doctors choose the right treatments or diagnosis and do other related actions. We present a thematic review in which we describe NLP and AI techniques from the literature in the field of structuring medical data.

Keywords: NLP; Artificial Intelligence; Structured information; Medical data

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