

Deep Learning - Potential Uses in Systematic Reviews

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Deep Neural Networks, broadly known as Deep Learning, have made revolutionary breakthroughs by achieving better performance compared to the traditional machine learning in almost all the application domains including numbers, images, sounds and text. There is no doubt that the main reason behind the sudden popularity and success of Deep Learning is the utility of high computational power with thousands and millions of training data. However, some of the newer approaches and algorithms that are enabled by deep learning in specific applications are much creative and deserved to be praised, where Deep Neural Networks-based techniques and algorithms in the domain of Text Mining, a family of Natural Language Processing (NLP), are not different. The proposed talk will start with a brief overview of Deep Learning and its recent success, followed by an introduction to the applications of Deep Learning in NLP, specifically in Text Mining. Potential uses of Deep Learning in Evidence Synthesis will be discussed with respect to document representation, document classification, document ranking and automated key-phrase generation.