Short Story Proposal

Natural Language Processing (NLP) helps empower intelligent machines by enhancing a better understanding of the human language for linguistic-based human-computer communication. Recent developments in computational power and the advent of large amounts of linguistic data have heightened the need and demand for automating semantic analysis using data-driven approaches. The utilization of data-driven strategies is pervasive now due to the significant improvements demonstrated through the usage of deep learning methods in areas such as Computer Vision, Automatic Speech Recognition, and in particular, NLP. This survey categorizes and addresses the different aspects and applications of NLP that have benefited from deep learning. It covers core NLP tasks and applications, and describes how deep learning methods and models advance these areas. It further analyzes and compares different approaches and state-of-the-art models.