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Question Answering AI System using SQUAD

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Abstract: In recent years, one needs answer to the question from a huge data on finger tips. Artificial Intelligence Question Answering is about making a computer program that could answer questions in natural language. It can be achieved using SQUAD (Stanford Question Answering Dataset) which will include questions asked by humans from the given comprehension. This paper aims at creation of a system specifically using BERT (Bidirectional Encoder Representations from Transformers) algorithm where user can input a question from the passage of text containing the answer, then span of text corresponding to the text will get highlighted and user will get the most relevant answer. Question answering is at the heart of natural language processing and is composed of two sections: Reading Comprehension and Answer Selection. Question Answering were based on statistical methods and researchers generated set of features based on text input. Answer Selection is a fundamental task in Question Answering, also a tough one because of the complicated semantic relations between questions and answers. Attention is a mechanism that has revolutionized deep learning community. These techniques are widely used among search engines, personal assistant applications on smart phones, voice control systems and a lot more other applications.

Keywords: BERT (Bidirectional Encoder Representations from Transformers), SQUAD (Stanford Question Answering Dataset)

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