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SQuAD: 100,000+ Questions for Machine Comprehension of Text Pranav Rajpurkar and Jian Zhang and Konstantin Lopyrev and Percy Liang

This paper successfully briefly explains many aspects of the problem, existing models, and their solution to the problem of reading comprehension. One main strength of the paper is the breadth of which is discussed in a short span, beginning with existing datasets that solve similar problems, continuing with an in-depth explanation on data collection, analysis, methods, and finally, results. I especially appreciated how the paper was very specific in their methods for data collection, since ensuring accurate data to start off with allows for accuracy in the analysis of that data. This paper thoroughly explained the process that the crowdsourced individuals would have to go through, using very focused assignments (only creating questions for paragraphs or articles at a time) and using a UI to help enforce these rules.

However, there are a few downsides to this paper. First, the methods section could have been discussed more, since I have confusion understanding the logistic regression and how that led the model to pick the correct answer in reading comprehension. In addition, many of the tables and graphs were put together on the same page in the report, which made it quite difficult to find the relevant graphics for the references in the text. I would prefer these pictures to be close to the relevant paragraphs. Finally, the methods section doesn't fully explain all the baseline methods or even their logistic regression with full clarity, so much so that I would not be able to replicate these methods.

I think one of the limitations of this model is that it is most functional with numerical answers, which may not always be the most useful operation for a machine to have. It's easy for a person to look up dates and numerical information on the internet, but much more difficult for one to try to understand a passage or find good answers to questions. Until a better model for answering questions about named entities is discovered, this model definitely has limits. In addition, it doesn't really provide insight into next steps or ways to improve this model, but this may just be because this problem is very difficult and the next step is unclear, especially for areas where the model has a very low rate of success, like named entity questions or greater syntactic divergence.

Going off of that, an interesting next project would be to combine this reading comprehension tool with a model to simplify text, like we read about in the previous critique. Though that tool was not exactly a text simplifier, using both of these aspects in one model would be very useful in applications like education. Not only would students be able to ask questions about certain topics, but also receive answers in a faster and more understandable way than a human could regurgitate.