**Paper 3**

**Summary**

The paper presents a fact-checking system that utilizes dense passage retrieval and text classification techniques to retrieve relevant evidence passages and classify claims based on the evidence. The dense vector retrieval model is employed to capture semantic relationships between queries and knowledge sources, and a three-step process is described for encoding claim texts and evidence, calculating similarity scores, and selecting top-k evidence. Text classification adding a classification layer on top of the DPR model is also employed. The experiments involve data analysis, hyperparameter selection, and comparison with different models, and the results show promising performance with high F-score and accuracy.

**Strengths**

Comprehensive data analysis: The author provides a detailed analysis of the training and development datasets, including the number of claims, relevant evidence, and their lengths. This analysis helps in understanding the data distribution and provides insights for subsequent steps in the research.

Clear explanation of methodologies: The paper effectively explains the dense passage retrieval and text classification techniques employed in the research. The three-step process for dense vector retrieval is described, along with the use of different loss functions, negative sampling, and in-batch negative sampling.

Effective use of tables and figures: The paper effectively employs tables and figures to present important information, making the results and key details interpretable.

**Weaknesses**

Incomplete result analysis: The paper briefly presents the results of the experiments but does not provide an in-depth analysis or interpretation of the findings. Further discussion on the limitations, potential sources of error, and suggestions for improvement would enhance the quality of the paper.

Lack of wording: There are so many grammar errors and typos in this report. Though this can not cloak the quality of this paper, it indeed makes it harder for the reader to catch up.