View Meta-Reviews

Paper ID
8418

Paper Title
On the Softmax Bottleneck of Recurrent Language Models

Track Name
AAAI2021

META-REVIEWER #2

META-REVIEW QUESTIONS

2. Overall Rating
7. Accept

3. Detailed Comments (Please also summarize discussion on this paper)
The central question examined in this work is whether, as conjectured in prior work, there is a strong correlation between the rank of the log probability matrix from a language model and its performance. The authors present a thorough empirical investigation to tackle this question and posit that improvements from prior models are likely due to implicit regularization effects and hyperparameter tuning and are not due to their ability to produce high-rank log P matrices.

The reviewers are unanimous in their view that this work presents valuable empirical insights and throws open a new line of investigation for the research community to further explore. Some reviewers have suggested organizational edits, and requested for additional details (especially in the later sections discussing the importance of model capacity and regularization effects) to make the narrative stronger and clearer. I agree with the reviewers and urge the authors to incorporate these edits in a revised version of the paper.