## View Meta-Reviews

Paper ID

3549

**Paper Title** 

Power-law in Sparsified Deep Neural Networks

**META-REVIEWER #1** 

## **META-REVIEW QUESTIONS**

1. Please recommend a decision for this submission.

Reject

2. Please provide a meta-review for this submission. Your meta-review should explain your decision to the authors. Your comments should augment the reviews, and explain how the reviews, author response, and discussion were used to arrive at your decision. Dismissing or ignoring a review is not acceptable unless you have a good reason for doing so. If you want to make a decision that is not clearly supported by the reviews, perhaps because the reviewers did not come to a consensus, please justify your decision appropriately, including, but not limited to, reading the submission in depth and writing a detailed meta-review that explains your decision.

This paper received favorable reviews and scores from the reviewers. However, the AC and SAC have assessed the paper independently and decided to reject it because a) the AC and SAC had to take a closer look at the paper, since the reviews have very low confidence, and b) the AC and SAC felt the paper had issues that didn't warrant it to be accepted at this time

As it happens, this paper stirred quite a bit of discussion. The paper seems to be developing a story about "degree distributions" of neurons in trained networks. There is an empirical and an algorithmic part. The significance of the empirical part of the work remains to be established: The reader is left wondering, why should we care about these empirical findings. The second part of the paper, which proposed an algorithm that is inspired by the findings in the first part, even if this algorithm was demonstrated to be a good one, would still not provide a justification for interest in the first part. What is missing is an explicit claim that, say, "power law distributions are good for generalization". If such a claim was made, it should be tested (or proved). But there is no such claim. The empirical verification of the algorithm proposed was viewed as weak: Much more rigor and thorough testing is required for an empirical paper which proposes a new algorithm.

The authors are encouraged to take these comments into account, strengthen the paper and submit it elsewhere.