#517 Local Minima Shape for Artificial Neural Network

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Code submission

Topics

	PDFRepSco	CodQuaSco
Review #517A	7	B
Review #517B	8	B

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Review #517A

PDF report feedback

Nice specific research question starting from a particular paper [5].

Definitions of sharpness & non-uniformity should be cited in section II.

How long were the algorithms run? Was test accuracy ok? When comparing SGD, Adam or L-BFGS (or any optimizer) with different learning rates it would be important to know at least if the optimization (train loss) or test accuracy were still comparable, as to be able to attribute to the landscape change at the optimum or optimizer failure to reach that.

I find the results super interesting, and generally well-described, but I would have hoped you include a more detailed discussion on it, what parts of [5] you could reproduce, what additional insights you gained, what's different from the insights of [5]. As well as a few more sentences on the pros/cons of the two notions of sharpness & non-uniformity.

Overall, good idea, well done and clearly presented, but improvements can be made on the study design.

PDF report score

7. 80%

Code feedback

looks ok

Code quality score

B. Adequate (full score)

Review #517B

PDF report feedback

Report is very well written and coherent. There is a very concrete hypothesis being tested, the related work is properly discussed, the experimental setup is well thought out, and the results are interpreted and put into context. The conclusion that “sharpness can be an efficient replacement of non-uniformity” demonstrates that the authors understand the background well and realize the implications of their results on the literature.

PDF report score

8. 90%

Code quality score

B. Adequate (full score)

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