



Figure 7. (Case Study: loss landscape metrics vs. validation metrics in sensitivity to hyperparameter changes). *Radar plot*: Model A has an optimizer issue, while Model B suffers from an insufficient model size issue. *Top*: Validation metrics fail to identify the specific failure source for each model, only indicating that both models are underfitting due to large training errors. *Middle*: Loss landscape metrics from our method reveal the source of failure: Model A exhibits poor connectivity, suggesting its model size is too small, while Model B, despite good connectivity, has a large training error, indicating a potential optimizer issue.