Deep Imbalanced Regression

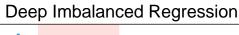
Yang Y, Zha K, Chen Y, Wang H, Katabi D

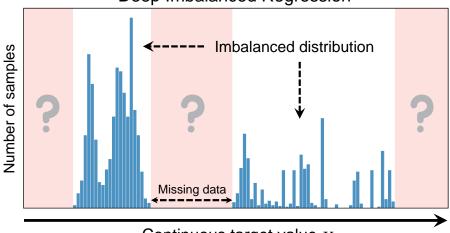
ICML 2021

Presenter: Gianmarco Midena

26 November 2024

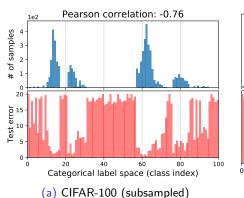
Deep Imbalance Regression - Overview





Continuous target value y

Test Error on Categorical vs. Continuous Label Space

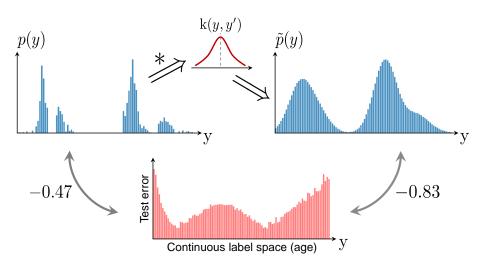


O 20 40 60 80 100 Continuous label space (age)

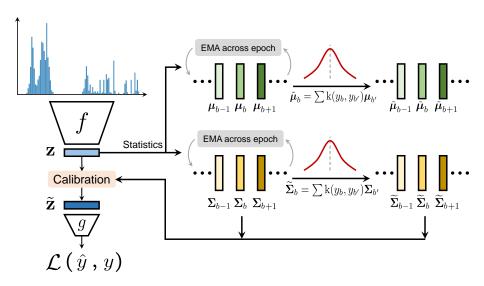
(b) IMDB-WIKI (subsampled)

Pearson correlation: -0.47

Label Distribution Smoothing



Feature Distribution Smoothing



References

Yang, Yuzhe et al. (2021). "Delving into deep imbalanced regression". In: *International conference on machine learning*. PMLR, pp. 11842–11851.