Are Text or Tabular Features Assigned More Importance?, Difference in Median Feature Importance (SHAP), by Combination Method

Median(Text FI) – Median(Tabular FI)

All-Text (Unimodal)

(n = 100)

All-Text

(n = 100)

 $\chi^2_{\text{Kruskal-Wallis}}(4) = 198.36, p = 8.44e-42, \hat{\epsilon}^2_{\text{ordinal}} = 0.40, \text{Cl}_{95\%}[0.34, 1.00], n_{\text{obs}} = 500$ $p_{\text{Holm-adj.}} = 0.18$ 0.4 -Pairwise test: **Dunn**, Bars shown: non-significant $\widehat{\mu}_{median} = 0.20$ 0.2 - $\widehat{\mu}_{median} = 0.12$ $\widehat{\mu}_{median} = 0.11$ $\widehat{\mu}_{median} = 0.06$ $\widehat{\mu}_{\text{median}} = 0.05$ 0.0 --0.2 **-**

WE (w=.25)

(n = 100)

Combination Method

Dataset: salary Text Model: DistilBERT

WE (w=.75)

(n = 100)

WE (w=.50)

(n = 100)