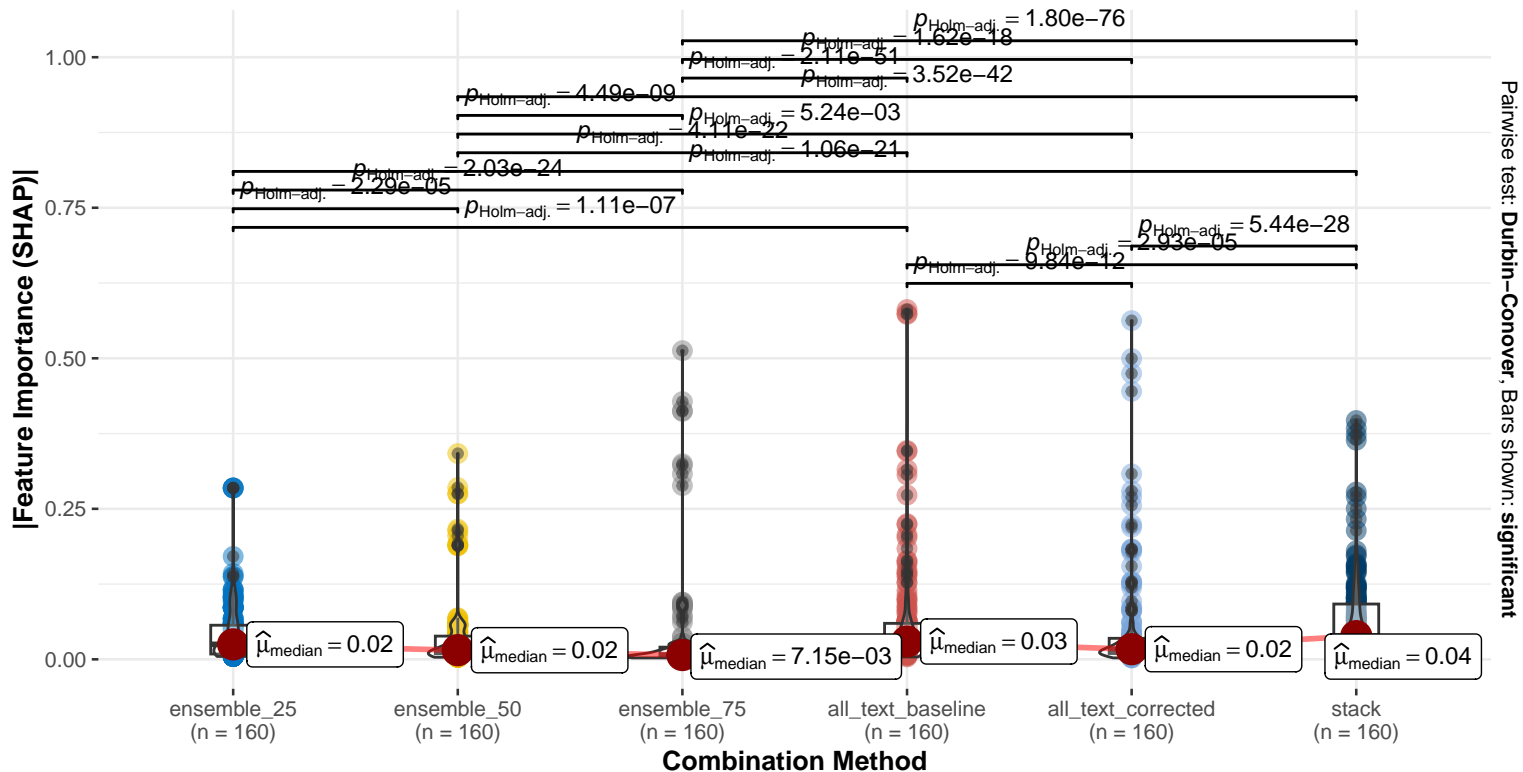**Are the Same Features Always the Most Important?**
Absolute Feature Importance (SHAP) Compared, by Combination Method

$\chi^2_{\text{Friedman}}(5) = 326.16$, $p = 2.36\text{e}{-}68$, $\widehat{W}_{\text{Kendall}} = 0.41$, $\text{CI}_{95\%}$ [0.32, 1.00], $n_{\text{pairs}} = 160$

$p_{\text{Holm-adj.}} = 1.80\text{e}{-}76$
$p_{\text{Holm-adj.}} = 1.62\text{e}{-}18$
$p_{\text{Holm-adj.}} = 2.11\text{e}{-}51$
$p_{\text{Holm-adj.}} = 3.52\text{e}{-}42$
$p_{\text{Holm-adj.}} = 4.49\text{e}{-}09$
$p_{\text{Holm-adj.}} = 5.24\text{e}{-}03$
$p_{\text{Holm-adj.}} = 4.11\text{e}{-}22$
$p_{\text{Holm-adj.}} = 1.06\text{e}{-}21$
$p_{\text{Holm-adj.}} = 2.03\text{e}{-}24$
$p_{\text{Holm-adj.}} = 2.29\text{e}{-}05$
$p_{\text{Holm-adj.}} = 1.11\text{e}{-}07$
$p_{\text{Holm-adj.}} = 5.44\text{e}{-}28$
$p_{\text{Holm-adj.}} = 2.93\text{e}{-}05$
$p_{\text{Holm-adj.}} = 5.84\text{e}{-}12$

Pairwise test: **Durbin–Conover**, Bars shown: **significant**

|Feature Importance (SHAP)|

$\widehat{\mu}_{\text{median}} = 0.02$ $\widehat{\mu}_{\text{median}} = 0.02$ $\widehat{\mu}_{\text{median}} = 7.15\text{e}{-}03$ $\widehat{\mu}_{\text{median}} = 0.03$ $\widehat{\mu}_{\text{median}} = 0.02$ $\widehat{\mu}_{\text{median}} = 0.04$

ensemble_25   ensemble_50   ensemble_75   all_text_baseline   all_text_corrected   stack
(n = 160)   (n = 160)   (n = 160)   (n = 160)   (n = 160)   (n = 160)

Combination Method

Dataset: airbnb