

Supplementary Material: Information Bottleneck-based Feature Weighting for Enhanced Medical Image Out-of-Distribution Detection

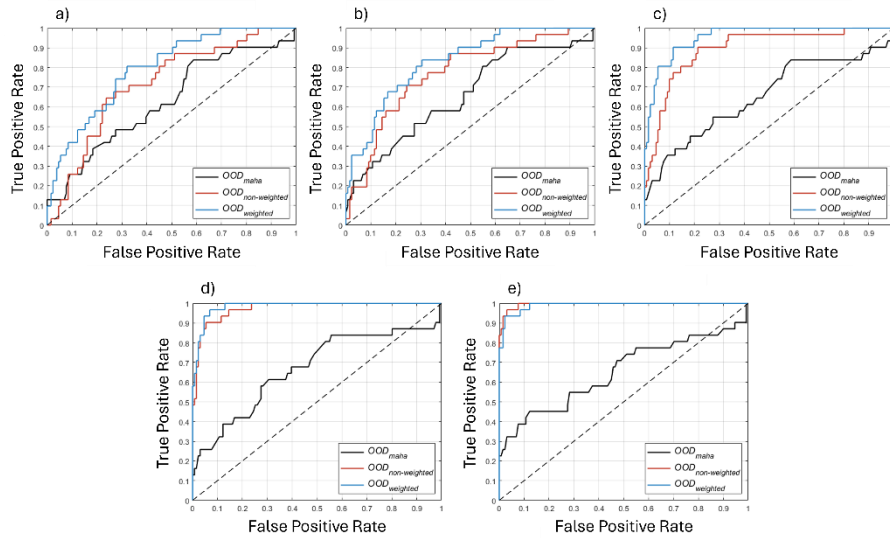


Fig. 1. Receiver operating characteristic curves for perturbed test image detection for each OOD distance measure. Curves are shown for detecting perturbations with magnitudes (a) $\epsilon = 0.00$, (b) $\epsilon = 0.25$, (c) $\epsilon = 0.50$, (d) $\epsilon = 0.75$, and (e) $\epsilon = 1.00$.

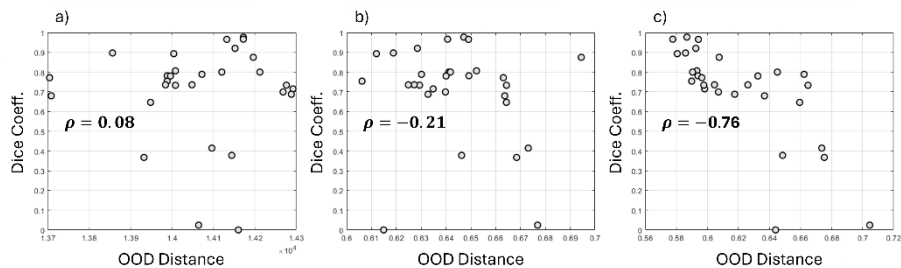


Fig. 2. Test data scatter correlation plots and Spearman's correlation coefficients (ρ) between liver tumor segmentation Dice coefficient and OOD distance measure for (a) the Mahalanobis distance measure (OOD_{maha}), (b) the non-weighted distance measure ($OOD_{non-weighted}$), and (c) the weighted distance measure ($OOD_{weighted}$). The $OOD_{weighted}$ measure is shown after full information bottleneck optimization.