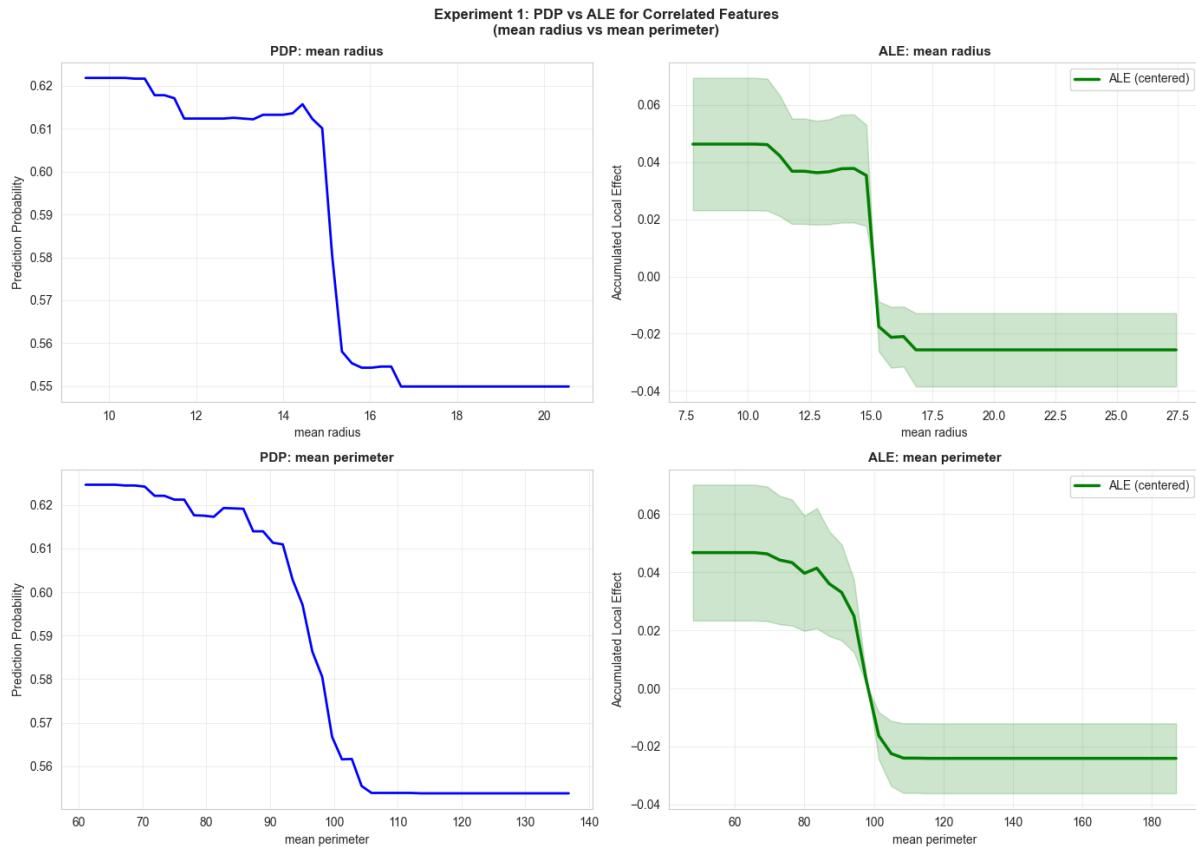


Explainable AI Banana Problem – 2

Global Feature Effect Exploration Report

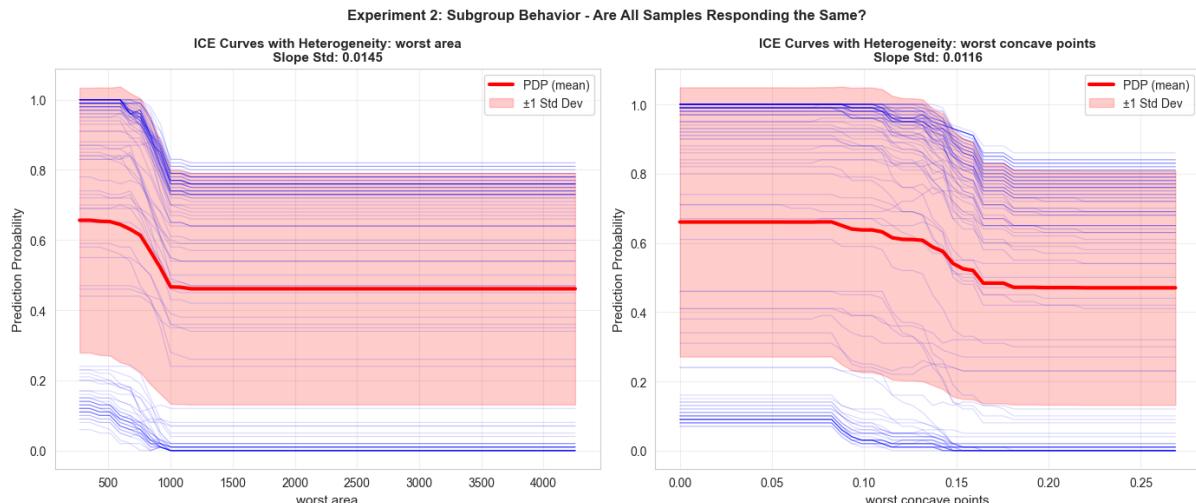
1. PDP vs ALE:

PDP shows sharper drops for correlated features (mean radius and mean perimeter), indicating possible overestimation due to independence assumption. ALE provides smoother and more reliable local effects.



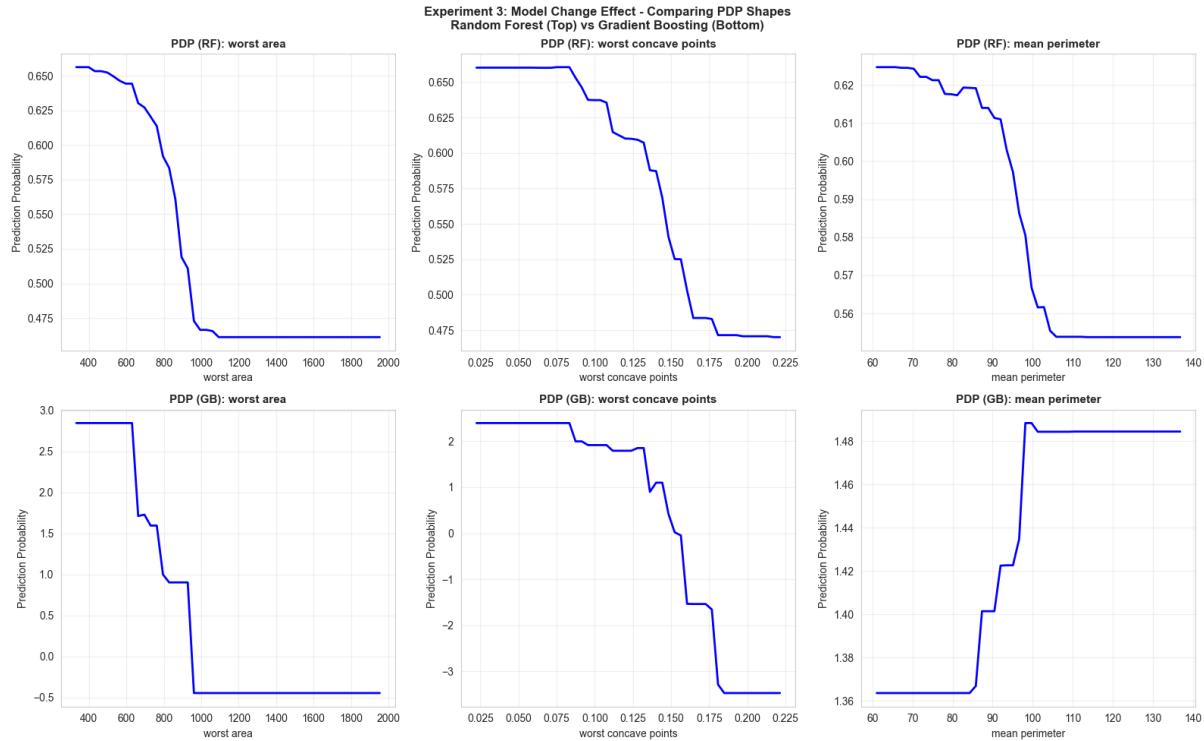
2. ICE Curves

ICE curves show significant heterogeneity, meaning not all samples respond the same way to feature changes. This indicates feature interaction effects



3. Model Change Effect

Comparing Random Forest and Gradient Boosting shows that interpretation is model-dependent. Gradient Boosting exhibits sharper threshold behavior compared to Random Forest.



PDP vs ICE vs ALE plot

Global Feature Effects: PDP vs ICE vs ALE (Random Forest)

