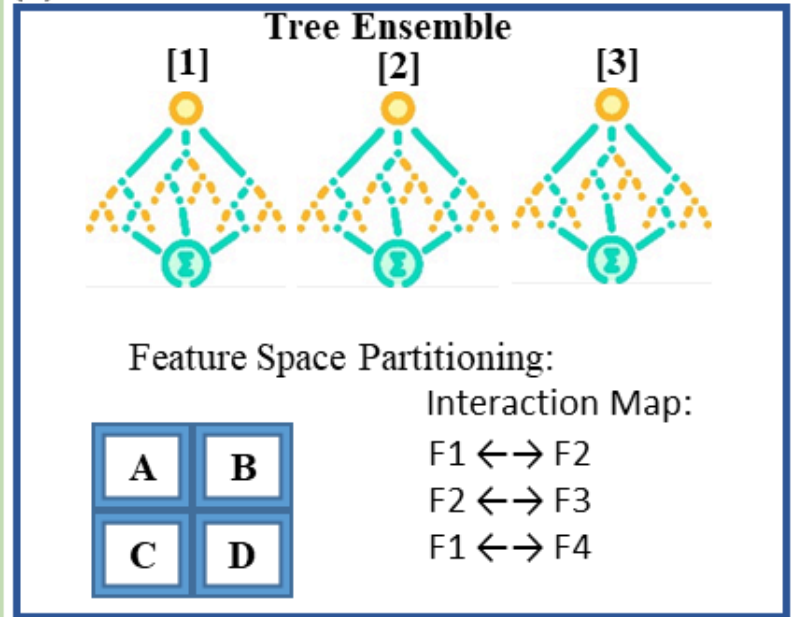
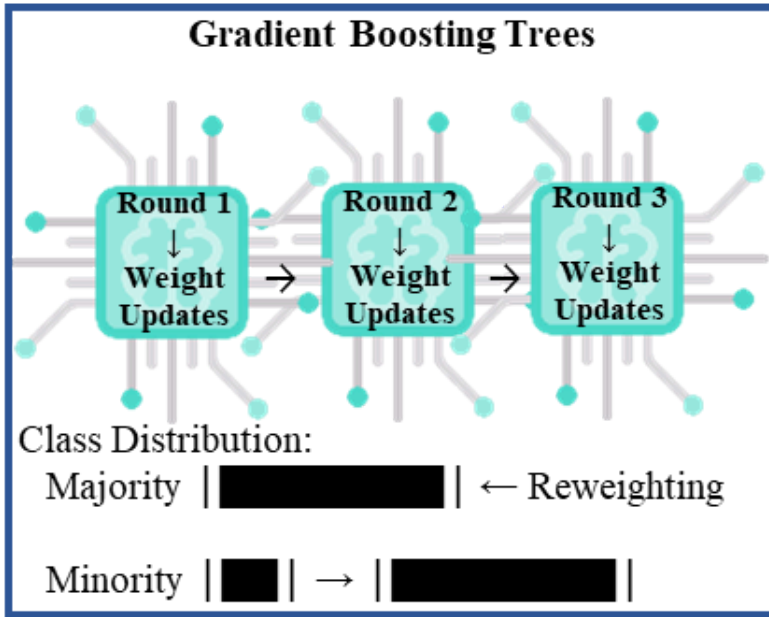


Predictions & Feature Importance Feedback

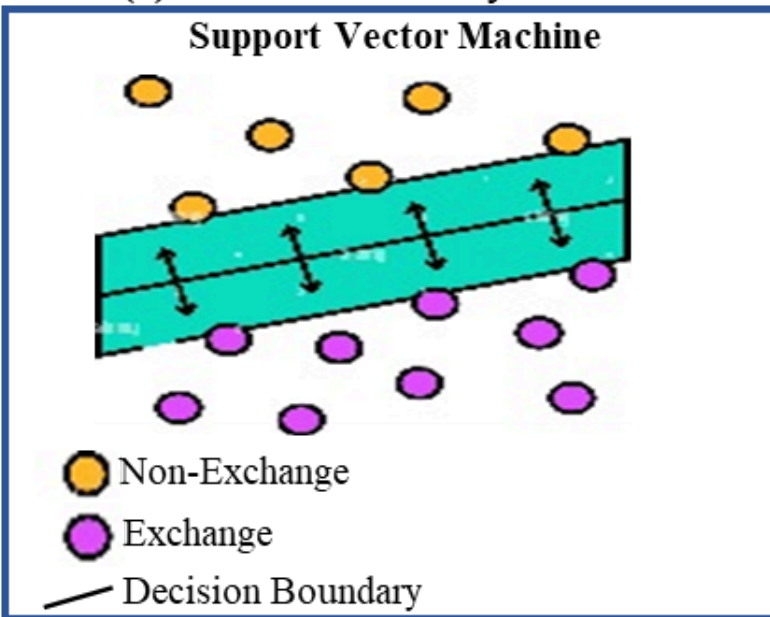
(a) Random Forest - Feature Interactions



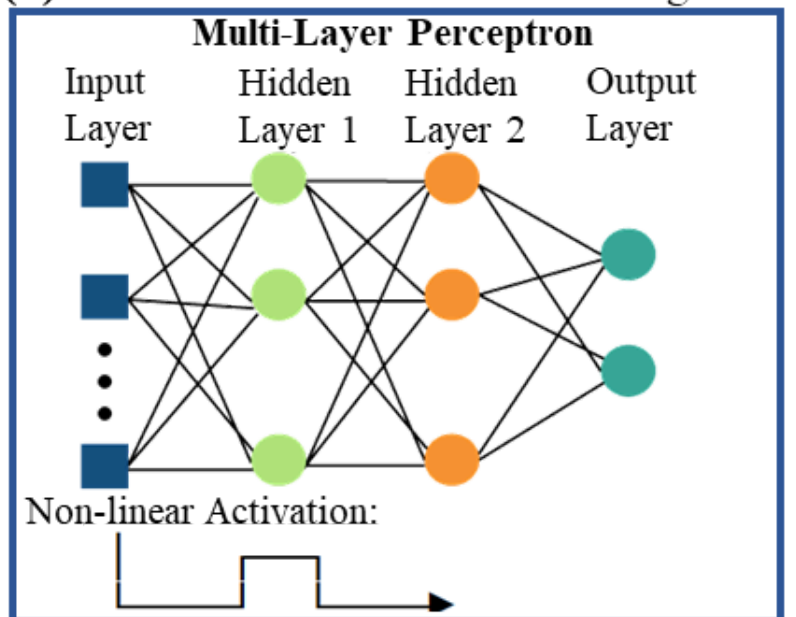
(b) XGBoost - Data Imbalance Handling



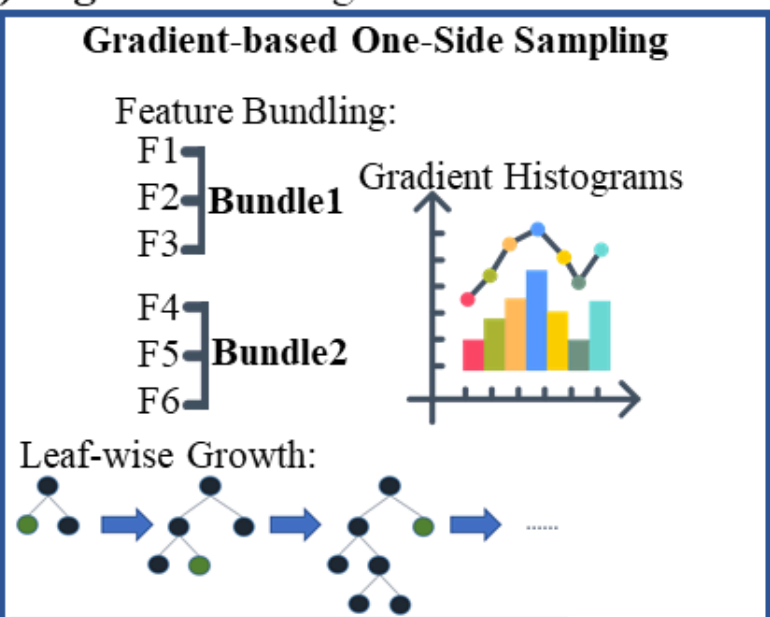
(c) SVM - Boundary Definition



(d) MLP - Non-linear Pattern Recognition



(e) LightGBM - High-dimensional Features



Ensemble Feedback

Feature Bundling

Gradient Sharing

Performance Metrics Flow

Key Relationships:

1. Feature Sharing: RF → XGBoost → SVM
2. Gradient Information: LightGBM → MLP
3. Boundary Information: SVM → MLP
4. Performance Feedback: All models
5. Ensemble Integration: All models contribute to final prediction