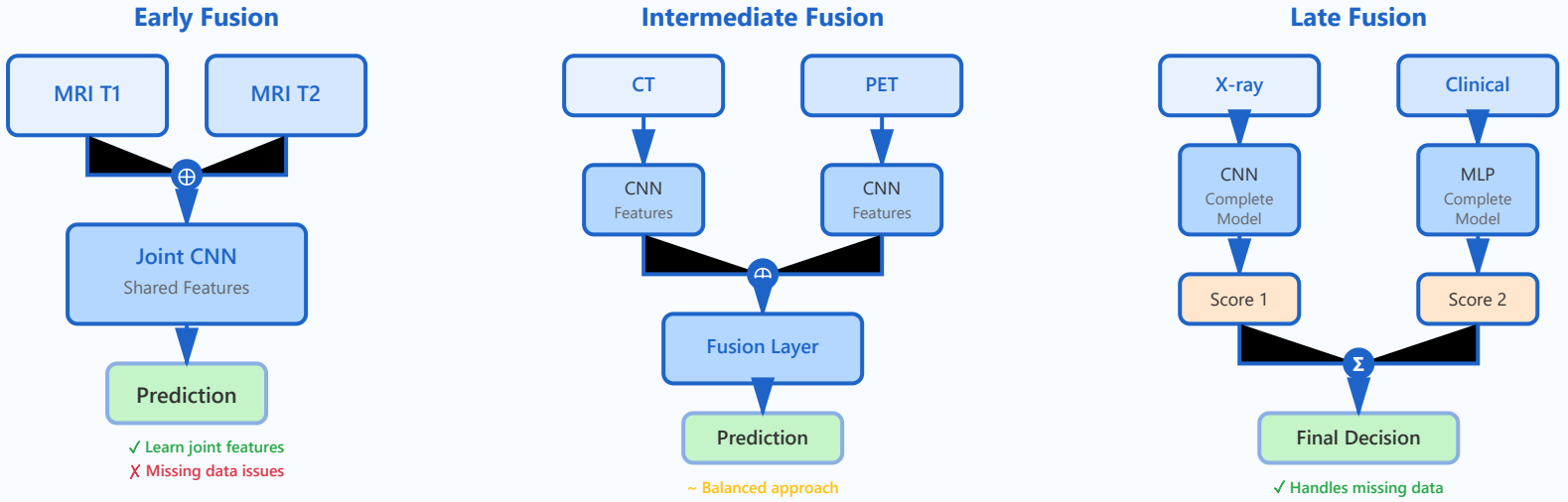
Multi-modal Fusion

Fusion Strategies Comparison



Early vs Late Fusion

Early: Combine at input/features. Late: Combine predictions. Depends on modality complementarity

Attention Mechanisms

Learn importance of each modality. Dynamic weighting based on input

Cross-Modal Learning

Transfer knowledge between modalities. Co-training and contrastive learning

Missing Modalities

Handling incomplete data. Imputation or modality-specific pathways

Clinical Protocols

MRI sequences (T1, T2, FLAIR), PET-CT fusion. Each modality provides unique information