

CORAL

Limited by second-order statistics and non-linear shifts
Mahmoodian et al., 2025

Joint Distribution Adaptation

Struggles with class imbalance or variability
Lu et al., 2024

Subspace Alignment

Fails to capture non-linear structures
Adachi et al., 2024

Classic Models

MIDA

Does not align conditional distributions
Mohammed et al., 2023

Geometric Transfer Learning

Struggles under strong non-linear deformations Satou et al., 2025

Transfer Component Analysis

Ignores class-conditional structure
Battu et al., 2025

Transfer Joint Matching

Produces ambiguous decision boundaries under class imbalance
Long et al., 2014