Learning Discriminative Manifolds from Multiple Data Modalities for Multimedia Content Understanding

**OBJECTIVES**

To discover the intrinsic structure of multimedia data with multiple modalities for multimedia content understanding [1-6]

1. For multi-label multimedia data, learn the correlation between different labels while preserving the discriminative information.
2. For multi-modal multimedia data, learn the consistency between different modalities while preserving the discriminative information.

**HIGHLIGHTS**

1. Dimensionality reduction in multiple ordinal regression (DRMOR) [1], whose projected subspace preserves all the ordinal information in multiple aspects or labels.
2. Modality-consistent harmonized discriminant embedding (MCHDE) [2,3], whose common subspace of multiple modalities preserves the manifold structure, the harmonized discriminant information, and the modality consistency simultaneously.

**SELECTED PUBLICATIONS**