Texture-aware embedding

Standard embedding

\[ d_{PC}(\cdot, \cdot) \]

Area-based approach: Point cloud distance

Feature-based approaches: Specific distances for a feature

Standard distance between attributes (e.g. Euclidean)

Similarity measure in dimensionality reduction method (e.g. t-SNE, UMAP)

One histogram per channel

\[ [\Sigma, \mu] \]

One covariance matrix and mean vector for all channels

\[ d_{\text{feat}}(\cdot, \cdot) \]

\[ d^{\text{OF}}_{\text{bhat}}([\Sigma, \mu]_i, [\Sigma, \mu]) \]
(a) Standard t-SNE  
(b) Local histogram  
(c) Covariance matrix and means  
(d) Point cloud