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Learning Unified Binary Codes for Cross-Modal Retrieval via Latent Semantic Hashing

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Abstract

Nowadays the amount of multimedia data such as images and text is growing exponentially on social websites, arousing the demand of effective and efficient cross-modal retrieval. The cross-modal hashing based methods have attracted considerable attention recently as they can learn efficient binary codes for heterogeneous data, which enables large-scale similarity search. Generally, to effectively construct the cross-correlation between different modalities, these methods try to find a joint abstraction space where the heterogeneous data can be projected. Then a quantization rule is applied to convert the abstraction representation to binary codes. However, these methods may not effectively bridge the semantic gap through the latent abstraction space because they fail to capture latent information between heterogeneous data. In addition, most of these methods apply the simplest quantization scheme

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