	doc_1		doc_2		decision	id
			authors	Yunchao Gong Qifa Ke Michael Isard Svetlana Lazebnik		
		 Yunchao Gong Qifa Ke M. Isard S. Lazebnik 	title	A Multi-View Embedding Space for Modeling Internet Images, Tags, and their Semantics		
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	title	A Multi-View Embedding Space for Modeling Internet Images, Tags, and Their Semantics	doi			1 1
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	journal	International Journal of Computer Vision				
	volume	106	id			
	doi	10.1007/s11263-013-0658-4		This paper investigates the problem of modeling Internet images and associated text or tags for tasks such as image-to-image search, tag-to-image search, and image-to-tag search (image annotation). We start with canonical correlation analysis (CCA), a popular and successful approach for mapping visual and textual features to the same latent space, and incorporate a third view capturing high-level image semantics, represented either by a single category or multiple non-mutually-exclusive concepts. We present two ways to train the three-view embedding:		1 11
	urls	https://www.semanticscholar.org/paper/7fceccc7a1046caa4936b14eeacb71ccf4d6be10	abstract			
	id	id-4794057921900810675				
	abstract	None				1 11
	versions			supervised, with the third view coming from ground-truth labels or search keywords; and unsupervised, with semantic themes automatically obtained by clustering the tags. To ensure high accuracy for retrieval tasks while		
				keeping the learning process scalable, we combine multiple strong visual features and use explicit nonlinear kernel mappings to efficiently approximate kernel CCA. To perform retrieval, we use a specially designed similarity function in the embedded space, which substantially outperforms the Euclidean distance. The resulting system produces compelling qualitative results and outperforms a number of two-view baselines on retrieval tasks on three large-scale Internet image datasets.	rnel	