Special Issue: Deep Learning in Image and Video Retrieval

Deep learning has led to numerous major advances in content based retrieval, multimedia analysis and computer vision. The new approaches have been shown to reach near-human levels of semantic understanding of visual media by using deep neural networks which simultaneously learn both features and the classifier from the training data. Deep learning has also become a powerful tool to produce new features and representations such as semantic segmentations and generative adversarial network (GAN) images which can be used for improving content based retrieval systems. All of these advances have also shown the importance of both new deep architectures (VGG, ResNet, GANs, etc.) and high quality training data sets such as ImageNet, NUS-WIDE and MIRFLICKR-1million.

This special issue aims to capture the state-of-the-art in deep learning in the context of image and video retrieval. We are especially interested in novel deep architectures for content based retrieval, original high quality benchmark datasets for deep learning, and new insights into deep learning systems both theoretical and empirical, especially ones which examine and critically assess the state-of-the-art. Specific topics of interest include but are not limited to:

- Deep learning architectures for image representations
- Deep learning for textual-visual cross retrieval
- Deep learning for sketch-based image retrieval
- Deep learning for efficient/high-performance image and video retrieval
- Large-scale image and video retrieval algorithms
- Multimodal information fusion for image and video retrieval
- Unified frameworks for multi-task learning
- Novel retrieval applications and systems
- New insights into deep learning systems
- New benchmark datasets intended for deep learning in image and video retrieval

Important Dates

- Submission deadline: April 29, 2019
- Initial decision: August 7, 2019
- Publication: early 2020

Submission

https://www.editorialmanager.com/mmir and select Article Type: "S.I : Deep Learning"

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