



Computer Vision & Image Understanding (CVIU): Special Issue on Computer Vision and the Web

The Web has become a large ecosystem that reaches billions of users through information processing and sharing, and most of this information resides in pixels. Web-based services like YouTube and Flickr, and social networks such as Facebook have become increasingly popular, enabling users to easily upload, share and annotate massive numbers of images and videos. Therefore, there is a critical need for novel algorithms able to understand big visual data and exploit noisy user annotations. Despite the recent success in visual recognition using a fully supervised setting, learning with weak labels and transferring knowledge to novel domains is still very challenging. This is a fundamental task in the open world, where the distribution of visual concepts follows a long tail that might change over time. Thus, the combination of computer vision and big data has become a very active interdisciplinary research area, involving computer vision, machine learning, multimedia, information retrieval, and data mining. This special issue aims at promoting new research directions for problems involving web-vision and social media, such as large-scale visual content analysis, search and mining.

Topics of interest include, but are not limited to:

- Indexing algorithms and technical challenges of handling big visual data
- Tagging, semantic annotation, and object recognition on massive visual collections
- Novel “webly-supervised” / weakly supervised learning algorithms
- Methods for dealing with noise, bias and long tails
- Visual data mining and knowledge discovery from the web
- Construction and evaluation of large-scale visual dataset
- Scene reconstruction and matching using large scale web images
- Survey papers regarding the topic of computer vision and the web

Authors who are unsure whether their planned submission is in scope may contact the guest editors prior to the submission deadline with an abstract, in order to receive feedback.

Important Dates:

- Submission Deadline: February 15, 2017
- First Notification: June 15, 2017
- Revised Manuscript: August 15, 2017
- Final Decisions: December 15, 2017

Guest Editors:

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