CALL FOR PAPERS
The 4th Asian Conference on Pattern Recognition (ACPR 2017)
Workshop on **Visual Image Understanding with Deep Learning**

Summary

Recent development of visual capturing devices brought into focus a new paradigm for visual image understanding. For instance, thanks to the digital cameras, smart phones, and old-fashioned camcorders, we are living in the age of massive image data at an unprecedented scale and pace. There is exceedingly rich information and knowledge embedded in such kind of visual content. The recent advances in computer vision allow us to mine such huge number of image data to obtain valuable insights. Due to the remarkable successes of deep learning techniques, we are now able to boost the performance significantly for image understanding, and initiate new research directions to understand image content. For example, convolutional neural networks have demonstrated superiority on modeling high-level visual concepts in images. Visual image understanding with deep learning is becoming an emerging research area in the field of pattern recognition.

The goal of this workshop is to call for a coordinated effort to understand the opportunities and challenges emerging in visual image understanding with deep learning techniques, identify key tasks and evaluate the state-of-the-art, showcase innovative methodologies and ideas, introduce large scale real systems or applications, as well as discuss future directions. The image data of interest cover a wide spectrum, ranging from object localization, object recognition, image parsing, to image semantic segmentation. Image understanding plays an important role for the task of high level vision, such as image caption, image retrieval, and video understanding, as well as for some real applications, including intelligence transportation and navigation, industrial control, and medical image processing, etc. We solicit manuscripts in all fields of image content analytics that explore the synergy of image understanding and deep learning techniques.

Scope

We believe the workshop will offer a timely collection of research updates to benefit the researchers and practitioners working in the broad computer vision and pattern recognition communities. To this end, we solicit original research and survey papers addressing the topics listed below, but not limited to:

- Semi-supervised and weakly-supervised deep learning for image understanding
- Deep domain transfer learning for image understanding
- Graph-based deep learning for image understanding
- Deep feature learning for image understanding
- Deep image understanding for large-scale image dataset
- Comparative study of deep learning for image understanding
- Data collections, benchmarking, and performance evaluation for deep learning

Submission Procedure

Authors are invited to submit original research contributions before the below deadline through the online manuscript submission system at (https://easychair.org/conferences/?conf=acpr2017). When submitting papers, authors should choose article type as "**WS:VIU Deep Learning**". Submission of a paper is permitted only if the paper has not been submitted, accepted, published, or copyrighted in other conferences and journals. All the submitted papers should be formatted according to the guidelines of ACPR 2017(please visit: http://acpr2017.njust.edu.cn/submission/list.htm).

Schedule

Title & abstract submission due: **22 July 2017**	Camera ready due: **31 August 2017**
Full paper submission due: **25 July 2017** (No extension)	Registration due: **2 November 2017**
Notification of acceptance: **20 August 2017**	Workshop date: **26 November 2017**

Workshop Chairs

Assoc. Prof. Quan Zhou
Nanjing University of Posts and Telecommunications,
China
Email: quan.zhou@njupt.edu.cn

Assoc. Prof. Huimin Lu
Kyushu Institute of Technology,
Japan
Email: dr.huimin.lu@ieee.org

Assoc. Prof. Guangwei Gao
Nanjing University of Posts and Telecommunications,
China
Email: csggao@gmail.com

Assoc. Prof. Zhanyu Ma
Beijing University of Posts and Telecommunications,
China
Email: mazhanyu@bupt.edu.cn

Prof. Longin Jan Latecki
Temple University,
USA
Email: latecki@temple.edu