Workshop on

Color in Texture and Material Recognition

in conjunction with the 18th International Conference on Image Analysis and Processing, ***2015 September 7***, *Genova, Italy*

info at: **www.ivl.disco.unimib.it/ctmr15**

Motivation

Recognizing real-world materials in images is a challenging task due to the rich variations of lighting conditions, appearance, surface properties. Color and textures are important components of material appearance.

The study of texture and material recognition have a long history in image analysis and computer vision. Recent works that deal with large collections of images taken from the Internet or that exploit large scale machine learning techniques have renewed the interest in these topics. The most relevant intuition is that features from other domains, such as object recognition, may achieve comparable or some times better performance than those achieved with features specially designed for texture and material classification. Moreover, while for some artificial materials color and texture are independent properties, for natural materials they are strongly related. Whether or not color information is useful for texture and material classification is still an open issue especially "in the wild" where imaging conditions such as lighting color and direction, orientation, sensor type, etc, are unpredictable.

This workshop explores these topics by providing new insights for understanding color in texture and material recognition.

Topics

This workshop covers different areas, including color science, computer vision, computer graphics, and machine learning.   We are soliciting original contributions that address a wide range of theoretical and practical issues including, but not limited to:

- *Feature design:* texture features, features from other domains, features obtained by deep learning;
- *Color Science:* photometric invariants, color invariants, color saliency, color constancy;
- *Vision Science:* color texture and material perception;
- *Performance evaluation:* databases under controlled conditions, classification in the wild;
- *Applications:* remote sensing, medical imaging, food recognition, industrial inspection;

Important dates

Paper submission deadline: **03 June 2015**
Paper acceptance notification: **03 July 2015**
Paper camera ready due: **15 July 2015**

Workshop organizers

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