

# ISAIR 2018

Nanjing, China

24-25 Nov., 2018



The 3<sup>rd</sup> International Symposium on Artificial Intelligence and Robotics

## *Special Session: Call for Papers*

### **Computational Aesthetics and Visual Arts Analysis**

***Submission Deadline: 1/March/2018 (Extended)***

#### **Aim & Purpose:**

Nowadays, the tasks of human brain are being challenged or replaced by computers or robots such as object recognition, AlphaGo, intelligent video surveillance. What is the last territory of human beings in the future? Someone points out that the aesthetics and visual arts may be the last tasks, which cannot be replaced by computers or robots. However, is this really true? Recently, novel artificial intelligence technologies such as deep convolutional neural networks (DNNs), generative adversary nets (GANs), and reinforcement learning (RL) have been used to analyze photos and artworks. DNNs are used for aesthetic quality prediction of images and videos. GANs are used to generate visual artworks. The RL is used to simulate what human artists do in polishing artworks.

The goal of this session is to call for a coordinated effort to understand the opportunities and challenges emerging in computational aesthetics and visual arts analysis, identify key tasks and evaluate the state-of-the-art, showcase innovative methodologies and ideas, as well as introduce large scale real systems or applications.

#### **Topics include but are not limited to:**

- Aesthetic quality assessment of visual media and artworks
- Painting style analysis and transfer
- Automatic polishing of visual media
- Artworks generation by computers or robots
- Large scale datasets for computational aesthetics and visual arts analysis
- Aesthetics guided visual media retrieval
- Historical artworks understanding
- 3D reconstruction and image metrology from paintings
- Object and people detection in art
- Authentication and Forensics
- Computer Vision and Cultural Heritage
- Application of learning methods to art analysis
- Security issues in the presentation and distribution of cultural information

**Session Chair:** Xin Jin, Beijing Electronic Science and Technology Institute, China

**Paper submission:** Contact Section Chairs and submit manuscript to:

<https://easychair.org/conferences/?conf=isair2018>

Template formatting is located at <https://shinoceanland.com/conference/isair2018/>

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