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# International Program Committee:

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MITSUBISHI ELECTRIC RESEARCH LABORATORIES





# CALL FOR PAPERS & SPECIAL TRACKS

# 10<sup>th</sup> International Symposium on Visual Computing



# ISVC'14 December 8-10, 2014 Monte Carlo Resort & Casino Las Vegas, Nevada, USA http://www.isvc.net/



## Scope

The purpose of the International Symposium on Visual Computing (ISVC) is to provide a common forum for researchers, scientists, engineers and practitioners throughout the world to present their latest research findings, ideas, developments and applications in the broader area of visual computing. ISVC'14 will consist of invited and contributed presentations dealing with all aspects of visual computing. The symposium will include several keynote speakers, special tracks, and a poster session.

## Topics

ISCV seeks papers describing contributions to the state of the art and state of the practice in the field of visual computing. The symposium is structured around the four central areas of visual computing: (1) computer vision, (2) computer graphics, (3) virtual reality, and (4) visualization. In particular, we are interested in papers that combine technologies from two or more of these areas.

Computer Vision: Early and Biologically-Inspired Vision; Color and Texture; Illumination and Reflectance Modeling; Segmentation and Grouping; Object Recognition/Detection/Categorization; Motion and Tracking; Video Analysis and Event Recognition; Biometrics (Face, Fingerprint, Hand, Iris); Pattern Recognition; Statistical Methods and Learning; Document Analysis; Medical Image Analysis; Image and Video Retrieval; 3D Reconstruction; Shape from X; Physics-based Modeling; Image-Based Modeling; Computational Photography; Human-Computer Interfaces; Vision for Graphics; Vision for Robotics; Performance Evaluation; Sensors and Systems; Secure Image/Video Communication; Image/Video Encoding/Compression; Applications

<u>Computer Graphics</u>: Geometric Modeling; Physically Based Modeling; Geometric Computing; Shape and Surface Modeling; Graphics Algorithms; Web Based Graphics; Perceptual Aspects of Computer Graphics; Computer Animation; Special Effects; Multimedia and Digital Media; Computational Photography; Image-Based Computer Graphics; Rendering Techniques; Stylized Rendering; Global Illumination, Photo-Realistic Computer Graphics; Volume Graphics, Semi-Transparent Media; Graphics System Architectures; Graphics Hardware and Hardware-Related Techniques (GPU); Data Compression for Graphics; Computer Graphics for Small/Large Displays; Parallelism in Computer Graphics; Graphic Toolkits; Interaction and HCI; Simulation for Computer Graphics; Applications.

Virtual Reality: Augmented Reality; Mixed Reality; Artificial Reality; Real-Time Rendering; Collision detection in VR; 3D Interaction for VR; Modeling and Simulation; Virtual Humans and Artificial Life; VR Systems and Toolkits; Collaborative Virtual Environments; Tele-collaboration; VR System Architecture; Multimodal displays; Projection and Display Systems; Human Computer Interaction; Presence and Cognition; Integration of VR and Multimedia; Immersive Gaming; Multi-user and Distributed VR and Gaming; Serious Games; Haptics, Audio, and Other Non-Visual Interfaces; Tracking and Sensing; Human Factors; User Studies and Evaluation; Hardware Devices; Applications

Visualization: Visualization Taxonomies and Models; Information Visualization; Scalar, Vector, and Tensor Visualization; Multi-dimensional and Multi-resolution Data Visualization; Time Series Data Visualization; Medical Data Visualization; Molecular Data Visualization; Geographic Data Visualization; Volume Visualization; Flow Visualization; Large Scale Data Set Visualization; Collaborative and Distributive Visualization; Isosurfaces; Rendering Techniques; Visualization Systems; Visual Analytics, Visual Data Mining and Knowledge Discovery; Display and Interaction Technology; Human Perception and Cognition; Human Factors; Haptics for Visualization; Evaluation and User Studies; Hardware for Visualization; Mesh Techniques and Compression; Applications.

# Submission Procedure

Papers submitted to ISVC must not have been previously published and must not be currently under consideration for publication elsewhere. All papers accepted will appear in the symposium proceedings which will be published by Springer-Verlag in Lecture Notes in Computer Science (LNCS).

# Other Information

Special tracks are intended to stimulate in-depth discussions in special areas relevant to the symposium theme. Significantly extended and revised versions of selected papers will be considered for publication in a special issue of the International Journal on Artificial Intelligence Tools (IJAIT) (ISI/SCIE indexed). Also, a best paper" award (\$500) will be sponsored by MERL.

Important Dates:

Special Track Proposals: Paper submissions:

Notification of acceptance: Final camera ready paper: Advance Registration: ISVC'14 Symposium:

April 1, 2014 August 23, 2014 October 7, 2014 October 31, 2014 October 31, 2014 December 8-10, 2014



