The First International Conference on Robot, Vision and Signal Processing

November 21-23, 2011, Kaohsiung, Taiwan

RVSP 2011 is the first International Conference on Robot, Vision and Signal Processing. The conference is technically co-sponsored by IEEE, Harbin Institute of Technology and Kaohsiung University of Applied Science with the website **http://bit.kuas.edu.tw/~RVSP11**. The conference intended as an international forum for the researchers and professionals in all areas of Robot, Vision and Signal Processing. Robot exhibition and competition programs will also be held during this conference period. Proceedings of RVSP 2011 will be published by the Conference Publishing Service of the IEEE Computer Society. Normally, it will be indexed by to IEE INSPEC, EI (Compendex), Thomson ISTP. We invite submissions of papers presenting a high-quality original research and development for the conference tracks: (1) Robot (2) Vision (3) Signal Processing.

SCOPE: Topics of interest include, but are not limited to:

Track I: ROBOT

- Micro robots and micro-manipulation
- Search, rescue and field robotics
- Medical robots and bio-robotics
- Space and underwater robots
- Tele-robotics and mobile robotics
- Dexterous manipulation and multi-robot systems
- Elements, structures, mechanism design and applications
- Modeling and identification
- Visual servoing
- Robot sensing and data fusion
- Perception systems
- Localization, navigation and mapping
- Computational intelligence in robotics
- Sensor networks
- Modeling of control system
- Intelligent control, motion control and neuro-control
- Robust control, adaptive control, fuzzy control and Control applications
- Simulation techniques and automation system in industry

Track Ⅲ: SIGNAL PROCESSING

- Signal analysis and visualization
- Signal mining and data fusion
- Signal control (wired & wireless)
- Signal transmission and receiving (wired & wireless)
- Source coding and channel coding
- System engineering and development for multimedia systems
- Multimedia sensing and sensory systems
- Multimedia networking and communication techniques (wired & wireless)
- Multimedia databases and retrievals
- Multimedia/multimodal signals interpretation and automatic recognition
- Multimedia hyperlink techniques and application

Track II: VISION

- Active and robot vision
- Vision theory and algorithm
- Vision-based object recognition
- Vision-based guidance of Robots
- Segmentation and feature extraction of vision images
- Encoding and transmission of vision images
- Image capture and processing of visual scene
- Identity authentication
- Human detection of the visual scene
- 2D and 3D scene understanding
- Event and scene recognition, retrieval and indexing
- Motion and tracking
- Video analysis and annotation
- Human-machine interaction
- Computational and architectural aspects of human vision
- Stereo vision and structure from motion
- Matching correspondence and flow
- Model-based object tracking in video
- Tracking of people and surveillance
- Retrieval of 3D objects from video sequences
- Detecting 3D objects using patterns of motion and appearance
- Image-based modeling and 3D reconstruction
- Virtual and augmented reality
- Vision-based medical applications
- Vision-based biomedical applications
- Model-based image and shape analysis
- Video games
- Computational photography
- Three-dimension display of the visual scene

Paper submission: http://bit.kuas.edu.tw/~rvsp11

Important Dates

-The deadline for paper submission: May 10, 2011

-The date for notification: July 1, 2011

-The date for camera-ready paper submission: August 1, 2011

The Conference Proceedings will be published by IEEE Press

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