The Visual Communications and Image Processing (VCIP) Conference, sponsored by the IEEE Circuits and Systems Society and supported by the National Cheng Kung University, the National Chiao Tung University, and the IEEE Tainan Section, will be held in Tainan, Taiwan during November 6-9, 2011.

Since 1986, VCIP has served as a premier forum in SPIE for the exchange of fundamental research results and technological advances in the field of visual communications and image processing. 2011 is the first time that VCIP will be held under the auspices of the IEEE. VCIP 2011 shall inherit the tradition of previous conferences in providing fertile ground for leading engineers and scientists from around the world to escalate collaboratively the research frontiers within these and related areas. Original and unpublished work relevant to, but are not limited to, the following topics are hereby solicited.

**Emerging Techniques for Next Generation Video/Image Coding**
- Content- and context-adaptive coding techniques
- Joint codec optimization w/ context information
- Parallel-friendly coding algorithms
- Perceptual coding and quality assessment
- Non-traditional coding techniques
- Representation and analysis of visual signals

**Advanced Techniques for Emerging 3D Videos**
- Representation, analysis and coding of 3D scenes
- Multi-view video processing and coding
- 3D videos and free viewpoint TV
- 2D to 3D video conversion
- Graphics representations and content creation

**Visual Communications**
- Video streaming and networking systems
- Internet video and QoS issues
- Video on demand and live video services
- Wireless and broadband videos
- Secure and robust video transmissions

**Systems and Techniques for Human Interaction**
- Mobile visual search
- Futuristic human-machine interfaces
- Multimodal recognition for mixed reality
- Natural image to 2D/3D virtual translation
- Display design for mixed reality
- Virtually real and mixed reality applications
- Biomedical imaging

**Embedded Systems and Architecture Implementations**
- Concurrent algorithm/architecture optimization
- Embedded software on DSP, ASIC, VLIW, multi-core CPU, GPU, etc
- Architecture based design on VLSI, FPGA, reconfigurable architectures, SoC, etc

**Cloud Multimedia Systems, Applications and Services**
- Infrastructure for media storage/distribution & computing
- Performance metrics for multimedia processing in clouds
- Large-scale multimedia content processing and analysis
- Complex semantic multimedia computing in clouds
- Mobile applications and services over clouds

**Submission of Papers**: Prospective authors are invited to submit a four-page, full-length paper, including results, figures, and references. VCIP 2011 additionally encourages the submission of one-page demo papers with a description of proposed working systems. Only electronic submission through the conference website [http://conf.ncu.edu.tw/vcip2011/](http://conf.ncu.edu.tw/vcip2011/) will be accepted.

**Tutorial and Special Session Proposals**: Researchers, developers, and practitioners from related communities are invited to submit proposals for organizing tutorials and special sessions on various emerging topics described above. Tutorials will be held on Sunday, November 6, 2011. Brief proposals must include title, outline, contact and biography information of the presenter, and a short description of the material to be distributed. Special session proposals must provide title, rationale, contact and biography information of the organizers, and a list of invited papers with tentative title and abstract.

Papers accepted for regular, special, and demonstration sessions must be registered and presented to assure their inclusion in the IEEE Xplore. Awards will be given to a number of papers with best novelty. Please visit the website for additional information regarding paper and proposal formatting instructions and submission details.

**Important Dates**
- **Tutorial and Special Session Proposals Due**: 1, April, 2011
- **Acceptance Notification of Tutorial and Special Session Proposals**: 16, April, 2011
- **Submission of Papers for Regular and Demo Sessions**: 6, May, 2011
- **Submission of Papers for Special Sessions**: 20, May, 2011
- **Acceptance Notification**: 15 June, 2011
- **Submission of Camera Ready Papers**: 29 June, 2011