

## CALL FOR PAPERS

### Special Session at the International Conference on Multimedia & Expo 2003 (ICME) on **Moving from Features to Semantics using Computational Media Aesthetics** Organizers: Chitra Dorai and Svetha Venkatesh

One of the big hurdles facing media management systems is the semantic gap between the high-level meaning sought by user queries in search for media and the low-level features that we actually compute today for media indexing and search. One promising approach at bridging the gap and building high-level semantic descriptions for media search and navigation services is founded upon an understanding of media elements and their roles in synthesizing meaning, manipulating perceptions and crafting messages, with a systematic study of media productions. Content creators worldwide use widely accepted conventions and cinematic devices to solve problems presented when transforming a written script to an audiovisual narration, be it a movie, documentary, or a training video.

The theme of this special session is to explore the growing interest in [\*Computational Media Aesthetics\*](#), which is the algorithmic study of visual and aural elements in media and associated analysis of the principles that have emerged underlying their manipulation in the creative art of clarifying and interpreting some event for an audience. The core trait of this approach is that in order to create effective tools for automatically understanding video, we need to be able to interpret the data with its maker's eye. We solicit papers from computer scientists, content creators, and producers that seek to address the fundamental issues in spanning the data-meaning gulf by a systematic understanding and application of media production methods. We invite expositions on the principles of media aesthetics and production rules and conventions that are frequently used in content creation with their interpretive guidance. We seek contributions that describe computational frameworks, and tools and techniques to extract expressive elements, higher order semantics and semiotics in multimedia.

Topics, include, but are not limited to:

- Challenges of semantic gap in media management systems
- Assessment of problems in defining and extracting high level semantics from media
- Examination of high-level expressive elements relevant in different media domains
- Joint analysis of aural and visual aspects in formulating elements for affect in video
- New algorithms, tools and techniques for extracting characteristics related to space, motion, lighting, color, sound, and time, and associated high-level semantic constructs
- Production principles for manipulation of affect and meaning
- Semiotics for new media
- Metrics to assess extraction techniques and representational power of expressive elements
- Case studies and working systems

**Submission Procedure:** Authors should submit a four-page manuscript in double-column format including authors' names, affiliations, and a short abstract. Only electronic submission will be accepted. Visit the ICME 2003 website, [www.icme2003.com](http://www.icme2003.com), to submit papers to this special session. When uploading a paper, an author should click on the "Moving from Features to Semantics," special session that will appear along with topical areas of regular papers.

**Review process:** All submissions to this special session will be reviewed following the same standard for regular contributed papers to ICME 2003.

**Deadlines:**

Paper Submission to the Special Session: January 15, 2003

Notification of acceptance: March 1, 2003

Camera-Ready Paper Due: March 31, 2003