

MPEG and Multimedia Metadata Community Workshop Results 2005

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The year 2005 was a successful year for the MPEG and Multimedia Metadata Community. The community was founded within a first workshop in March 2005 in Klagenfurt, Austria, initiated and organized by Harald Kosch. A second workshop, which took place at the I-Know 05, the International Conference for Knowledge Management 2005 in Graz, Austria, was organized by Mathias Lux and Michael Granitzer to enlarge the community and to plan future joint activities. With a third workshop at the RWTH Aachen, Germany, organized by Marc Spaniol and Ralf Klamma, the community grew further, aims of the community were clarified and the schedule for 2006 was developed.

Within the three workshops a lot of topics and projects have been discussed. The J.UKM special issue on the MPEG and Multimedia Metadata Community Workshop Results 2005 aims to distribute results of community discussions and projects of the community members. The contributions to this issue have been presented by at least one of the authors at one of the above mentioned workshops. The discussion of the community has been integrated and a scientific paper has been generated. The publication has then been peer reviewed by community members. Two different types of contributions have been accepted. Technical notes are smaller in size, but present valuable partial results of ongoing research. Full papers provide more in depth discussion of applications and approaches as well as results and conclusions. From the various presentations of the three workshops in 2005 six topics have been selected for publication, whereas only the last contribution is not a full paper but a technical note.

The contribution "Analysis of the Data Quality of Audio Descriptions of Environmental Sounds" by Dalibor Mitrovic, Matthias Zeppelzauer and Horst Eidenberger from the Vienna University of Technology in Austria presents an analysis of a broad set of state of the art audio features and descriptors. The information content as well

as redundancy and dependency between features is investigated. Furthermore a new measure for the information content of descriptors based on variance is introduced.

The article “MPEG-7 meets Multimedia Database Systems” by Mario Döller from the University Passau in Germany shows the impacts and requirements of an integration of MPEG-7 as data model to multimedia database systems. Topics like indexing and access structures as well as query languages and query optimizations are addressed.

The paper “A Description Infrastructure for Audiovisual Media Processing Systems Based on MPEG-7” by Peter Schallauer, Werner Bailer and Georg Thallinger from Joanneum Research in Graz, Austria, introduces a metadata model for describing audiovisual content, which is applicable to a broad range of applications. In addition access tools for usage and manipulation of the model are introduced.

The contribution “Community Hosting with MPEG-7 compliant Multimedia Support” by Ralf Klamma, Marc Spaniol and Yiwei Cao from the RWTH Aachen in Germany introduces a novel information systems architecture for the enhancement of community engines. Within their work they focus on multimedia services and the MPEG-7 multimedia content description interface.

The paper “Semantic Applications on MPEG-7 Descriptions of Multi-modal Meeting Corpora: First Results” by Victor Manuel Garcia-Barrios and Christian Gütl from the Graz University of Technology, Austria, presents an architecture for annotation and retrieval of multimodal data recorded on meetings. Furthermore they describe the process of interchange of low-level multimodal data between different heterogeneous distributed services based on MPEG-7 descriptors.

The article “On the Complexity of Annotation with the High Level Metadata” by Mathias Lux from the Klagenfurt University in Austria and Michael Granitzer and Werner Klieber from the Know-Center Graz, Austria, summarizes the results of an user evaluation of the annotation of digital photos with selected MPEG-7 description schemes, with focus on the MPEG-7 Semantic Description Scheme in the only technical note in this issue. The time taken for annotation by novice users was compared for two independent tasks and compared to the medium time used by a professional user for annotation.

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