



Master Thesis

Title Master Thesis in Multimedia Database Systems

Subject Profound analysis and comparison of existing AV formats

Background As many companies produce movies and audio-video streams almost as many formats can be found in the world. A lot of work has been done in order to standardize description of audio-video streams. All formats must describe general parameters of audio-video stream like frame rate, width and height of the frame, color depth, size, but some of them have more extended description. They can include details about used compression methods, duration time, searching/forwarding/backwarding data, special objects and video content information. The existing standards were made by specially founded organizations such as MPEG, ITU-T (CCITT) or by the largest IT companies such as Microsoft, Apple.

This work will partly support the RETAVIC project (<http://www6.informatik.uni-erlangen.de/retavic/>) and could be helpful for the VirtualMedia project (<http://pfau.informatik.uni-kl.de/virtualmedia/>).

Task The brief outlook for almost all existing AV formats should be done in order to recognize correctly what kind of AV stream descriptions can be found. So the profound analysis of them is required. Then the completed data characterizing each kind of description should be summarized and compared in a correct way. At the end some discussion about parameters should be performed and the answers for some questions should be obtained i.e.: What is important in AV stream description? What should be added to these descriptions? Which data is not necessary? Are there any shortages (lacks, defects) of existing formats?

Requirements

- good knowledge of English
- interest in multimedia area
- familiarity with MPG, AVI, QT, RM or at least with one of existing AV formats could be helpful

Contact and more information: Maciej Suchomski, 08.136, ms@informatik.uni-erlangen.de
