Cube-Tec Alum Christoph Bammann wins diploma thesis award

Christoph Bammann (middle) with Prof. Dr. U. Bühler (FBTI) and Monika Lappe-Heindörfer (Lufthansa Revenue Services GmbH)

Each year, the Fachbereichstag Informatics (FBTI) hosts a competition for outstanding student-papers, which are adjudicated by professors from various locations throughout Germany. One of this year's highlights was the award ceremony for outstanding student activities. Dipl.-Inf. Christoph Bammann (26) was one of the five featured graduates, and was honored for a paper he created at Cube-Tec International (Bremen, Germany) in 2006.

The benefactors which included Lufthansa Revenue Services GmbH were cooperation-partners of the nordakademie. The prize of 1.500 Euro went to Christoph Bammann for his thesis „Rulebased analysis and processing of metadata for audio application". Christoph Bammann studied computer science in media at the university of applied sciences and wrote his thesis at Cube-Tec under scientific management of Dr. Andreas Plass. „In my opinion this is a modern and very interesting study course whitch includes very good future-chances." (Christoph Bammann)

The impulse for his thesis and the framework requirements came from Jörg Houpert, while the interface-specification for the use of the the DOBBIN RuleEditor came from Thorsten Jüttner - both of Cube-Tec International.

The application is really universally applicable - in any situation where metadata-based mass-processes has to be controlled. The practical application areas range from clear business-process-modelling in service-orientated architectures to self controlled process-chains in media-production. Thus complex workflows can be designed with all decision based processing steps in the workflow defined by rules. Every media file can be generated during processing. So complete tasks previously requiring hands-on control by specialists can now be fully automated processes.

Prof. Dr. Peter Riegler, the professor that coached Christoph Bammann was

quoted as saying: „Mr. Bammann has already inspired me at my laboratory-presentation of multimedia-technique, where he linked his musical knowlage with informatics. I'm really fascinated by his thesis, because the highest aim in science and technology is to leave out all unimportant things - and that's what he got."

Prof. Dr. Peter Riegler

Christoph Bammann

TYPICAL APPLICATIONS AUTOMATIC PROCESSING OF METADATA

CUBE-TEC
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The basic principal of working with the RuleEditor:

Select the metadata you want to use as input – define a rule how they should interact and generate new metadata as output. Define the new output metadata as a macro and daisy chain the macros, or build additional rules how the results of the macros have to interact.

Example-1:

Quality assessment of sound files

Using the RuleEditor with events from the Audiofile-Inspector XML quality report - a simple rule could be:
"Show me all files, which have more than x errors of a special type and with a given priority".
Combining such types of simple rules, you can generate a complex overall quality measure for your media files, based on the individual Audiofile-Inspector quality report events.

Example-2:

Validate and Merge metadata from different sources

Lossy compressed sound formats uses different metadata formats. If you have iTunes metadata (m4a) and mobile sounds 3GPP metadata (3gp) you can define a rule to verify and merge the individual tags to generate automatically ID3 tags usable for MPEG Layer 3 sound files.

With RuleEditor you can do all that graphically without writing any line of code.