

UBIVERTEX - Letter of Intention

Institute/Company

Name: Institut de Recherche en Informatique de Toulouse

Country: France

Activity domain: Scientific Research in Computer Science

Number of employees: ☐ <50 ☐ <250 x > 500

Name of the department/research team: SAMOVA (Structuring, Analysis and MOdeling of Video and Audio contents)

Scientific contact

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Challenge descriptions: Research developments in multimedia content indexing requires larger and larger databases – but more than the size of these databases, we are facing some technical limitations which can only be solved by distributed massive storage and computing devices.

The first limitation stands in the ability to share annotations. This is a very costly step in order to allow indexing tool comparison and to ensure the ability to reproduce any experiment at any time. Generating those resources is generally nowadays a mutualized work between several labs, but this requires that a same corpus is shared among those labs.

Following the same idea, the second problem stands in the ability to make experiments on a same large content set in order to be able to duplicate or to compare results in a scientific process to assess methods developed par different research groups.

The third point is about protecting critical tools which cannot be distributed (for patent or any other protection reasons) but which are mandatory in a given processing chain. In this case, the runtime code must remain on the side of its owner, and so the data must be uploaded by the server side.

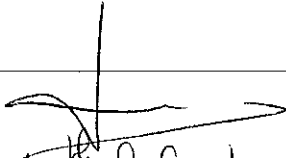
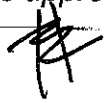
Among all the scientific issues currently addressed in the field of multimedia content indexing, we are more precisely focusing on how using annotated databases coupled with a search engine as a knowledge source to automatically build models of various concepts in order to use them to index some other databases which would not have been previously annotated.

The Samova research group works on automatic indexing of audio and video content sets. This group has got already a long experience on addressing large data bases. Thanks to UBIVERTEX, this group will be able enlarge his experiences to various databases and to build strengthened models able to build more accurate index.

Type of commitment (internship, Phd grant, engineering staff):

The group is committed in several projects funded by OSEO (Quaero – a French-german project on multimedia information retrieval), ANR, the Region, the CNRS, etc. The International collaborations allow some of the researchers to take part in supervising PH-D thesis in various universities (Katmandou, Bangkok, Beyrouth). The group will find the financial support and the human resources for internships and PH-D grants.

Number of persons involved in these challenges: 7 permanent researchers, 4 PH-D students.

Signature of Scientific Contact:	Signature of the Legal Representative / Head of the Institute / Project Coordinator (delete as appropriate)
	
Date: 12 th of September 2011	Date: 12/09/2011