



MUMIS

Multimedia Indexing and Searching Environment

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Participants

University of Twente/CTIT
Sheffield University
University of Nijmegen
Deutsches Forschungszentrum für Künstliche Intelligenz
Max-Planck-Institut für Psycholinguistik
ESTEAM AB
VDA

Objectives

Develop a technology for automatic indexing and retrieval of data from different media sources (text, radio and television Programmes) for specialised Domains (E.g. Football)

Innovation

Uses multimedia and multilingual sources.
Automatic multimedia indexing by applying information extraction (IE) and automatic speech recognition (ASR).
Merges information from many sources to improve the quality of the annotation database.

IE Task

Named Entities:

- Person => player, referee, etc.
- Place => location on the pitch, etc.
- Time => relative time (2 min)
- Numbers => score, distance

Meta Data(result, teams, referee, city, stadium, ...).

Events:

31 events in the football domain: shot on goal, goal, yellow card, red card, foul, free-kick, pass, etc.

Text Sources

Tickers
England: Seaman, G. Neville, P. Neville, Campbell, Keown, Beckham, Scholes, Shearer, Owen, Ince, Wise. Substitutes: Martyn, Wright, Southgate, Barry, Gerrard, Barmby, Heskey, Fowler, Phillips.
1 England kick off. After all the expectation, we're finally under way.

Comments
After 34 years of hurt, self examination, navel gazing, inferiority complexes and frustration, Kevin Keegan believes the tide of German superiority over England has turned.'

Matches
Alan Shearer scored the all-important goal, not one of his most difficult but a strike destined to be remembered longer Than many others...

GATE-based IE System

Format handling automatically provided.
Tokenisation, sentence identification and part-of-speech tagging provided.
The customisable NE recognition component only needed small adaptation.
The graphical development environment enables debugging and performance evaluation.

GUI



Off-line Task

ASR and NLP/IE.
Merging the information from the different sources.
Create a database for searching.

On-line Task

Searching and Displaying.
Search for interesting events with formal queries.
Indicate hits by Thumbnails.
Play scene via The Internet.