Hum a few bars and I'll find it

January 25 2007

A European research consortium hopes to make it much easier to find audio/visual content online. The new search approach will be driven by content or example rather than relying on key words and tags.

Led by IBM Research, partners from academia and industry have launched the Search on Audio-visual content using Peer-to-peer Information Retrieval (SAPIR). SAPIR aims to find new ways to analyze, index, and retrieve the vast amounts of speech, image, video, and music filling the digital universe.

"Today's popular search engines work within defined boundaries," explained Yosi Mass, project leader for SAPIR at the IBM Research Lab, Haifa. "Sapir's goal is to establish a giant peer-to-peer network, where users are peers that produce audio-visual content using multiple devices and service providers are super-peers that maintain indexes and provide search capabilities."

SAPIR will incorporate such technologies as voice recognition, image processing, indexing algorithms, sophisticated ranking mechanisms, and real search in audio-visual content. Searching by example rather than text-based queries will allow users to say a word out loud and have the engine look for a similar speech pattern. Another scenario would mean participants could input a picture of a saxophone and have the engine search for similar shapes.

Backed by the European Commission, researchers from the IBM Haifa Lab are leading a consortium of nine partners on the $5.8 million

project. Participating institutions include IBM Research (Israel) Max-Planck-Institut (Germany), University of Padova (Italy), CNR (Italy), Eurix (Italy), Xerox (France), Masaryk University (Brno, Czech Republic), Telefónica I+D (Spain), and Telenor (Norway).

Source: IBM