

Music Browsing



presented by

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Presentation Outline



- Introduction
- Goal
- Related Work
- System Design
- Demo

Introduction



- Digital audio collections are growing fast
- How do you find 1 song out of a 2 000 000-song collection if you only heard it once and don't know the title of the song or the name of the artist?
- What about new music discovery?
- iTunes Demo

Goal



- Find a (more) efficient way to **discover / browse** music
- Investigate the use of the **cocktail party effect**
 - Exploit ability of the human to focus its listening attention on one sound source in its environment
- Hypothesis
 - Being exposed to multiple audio streams simultaneously, the user may be able direct himself/herself towards the music he/she prefers (i.e., the stimuli) in a virtual auditory space
- Not meant to be a replacement to current audio search/browsing technologies, but rather a **complement** to it.

Related Work

- Sonic Browser (Limerick)

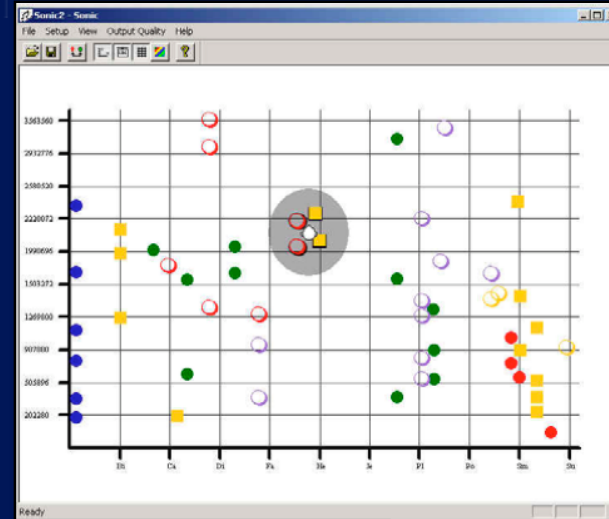


Figure 1: Sonic Browser (Fernström and Brazil 2001)

- Cocktail Party Browser (IRCAM)

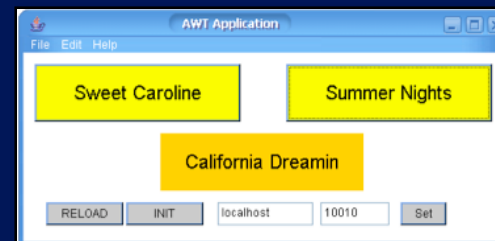


Figure 2: Cocktail Party Browser (IRCAM)

System Design



- Assumptions
 - Classification mechanism exists (Cory)
 - Similarity mechanism exists (Rebecca)
- Looking at an efficient way to:
 - Present audio data
 - Navigate through the audio data

Demo



- Tests currently performed on the 8-channel audio system in CAML
- Using Max/MSP for prototyping
- Prototype: Simple 4-channel system with 2D position adjustment