

Tecnología Musical, Redes Sociales y Multiculturalidad

Xavier Serra

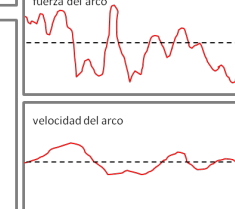
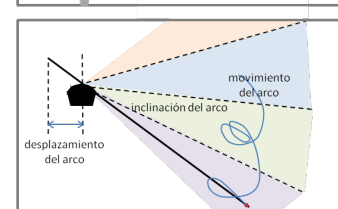
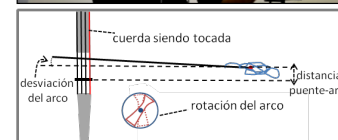
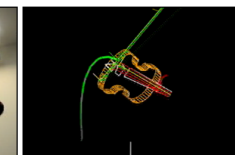
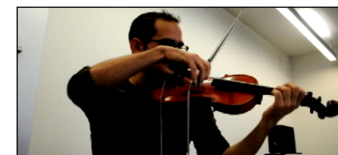
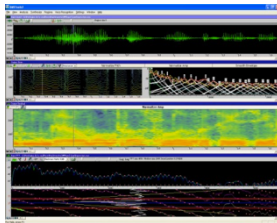
Music Technology Group

Universidad Pompeu Fabra, Barcelona

<http://mtg.upf.edu>

MTG: Temas de Investigación

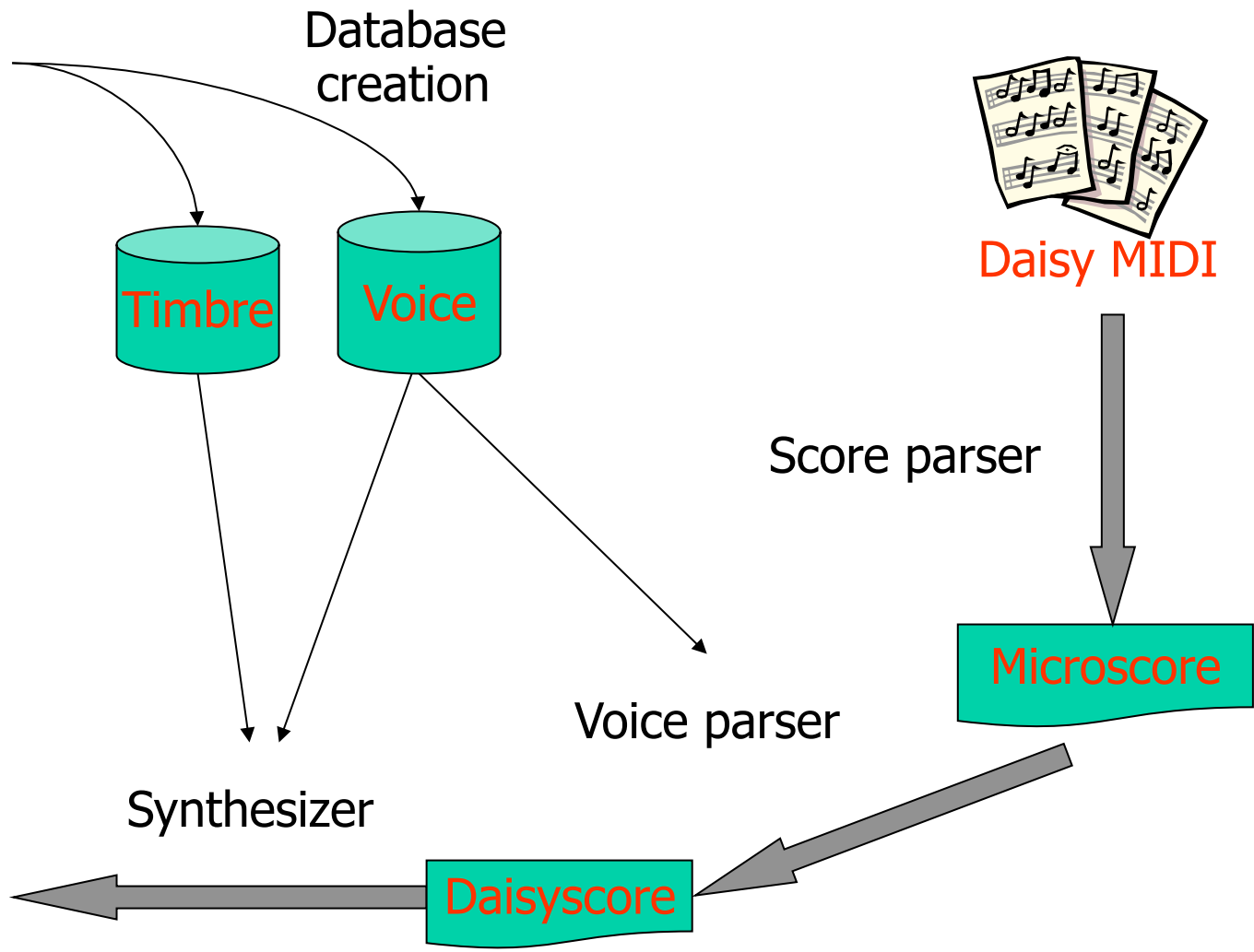
1. Procesado del señal de audio
2. Descripción del sonido y de la música
3. Interacción musical
4. Modelado de la interpretación musical
5. Comunidades musicales

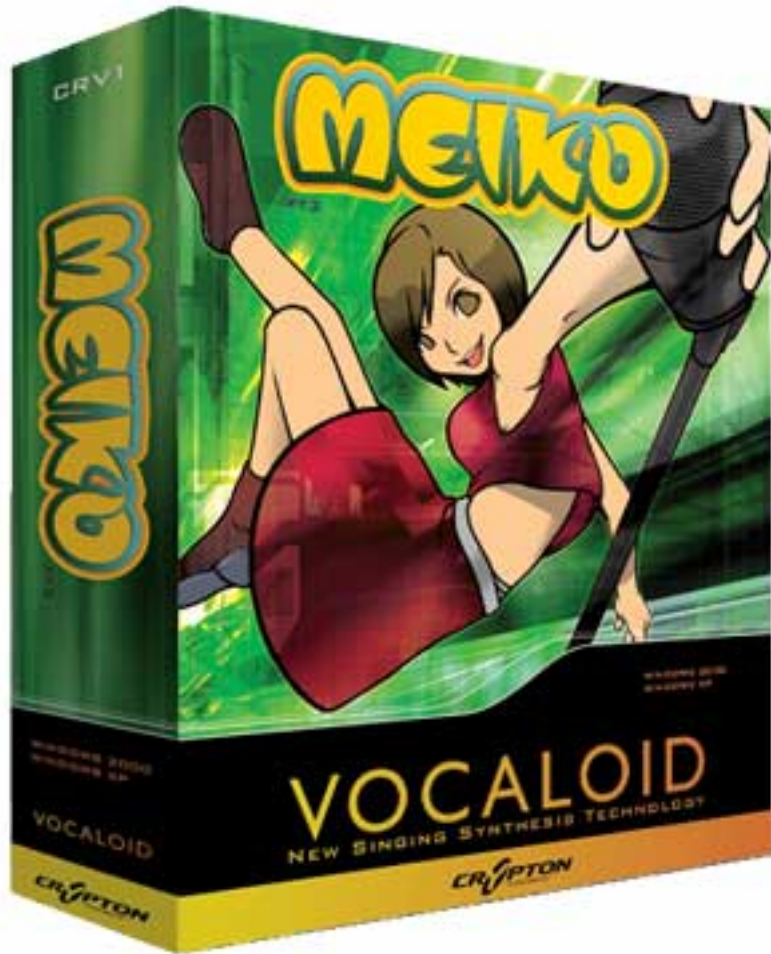


Temas

- Síntesis de voz -> Vocaloid -> Hatsune Miku
- Mesas interactivas -> Youtube -> Reactable Systems
- Descripción sonido -> Web -> Freesound.org
- Tecnologías musicales -> India -> CompMusic

Síntesis de voz





GRID: 1/32 | QUANTIZE: 1/32 | X: 5:1:300 | Y: G#4 | TEMPO: 137.00

LYRICS ATTACK DYNAMICS
 PHONEME VIBRATO

MEASURE TEMPO

VOCALOID Icon Palette

- ATTACK: NOMAL, ACCENT, PORTA-MENT
- VIBRATO: NOMAL, SOFT, EX-TREME
- DYNA: *fff*, *ff*, *f*, *mf*
- CRESC.: [Crescendo symbols]

so [s@U1] *fff*

fun [f V n]

its [i t s]

I- [a I]

so [s@U1]

sad [s d]

m [m]

you [j u:]

the [D @]

are [Q@1]

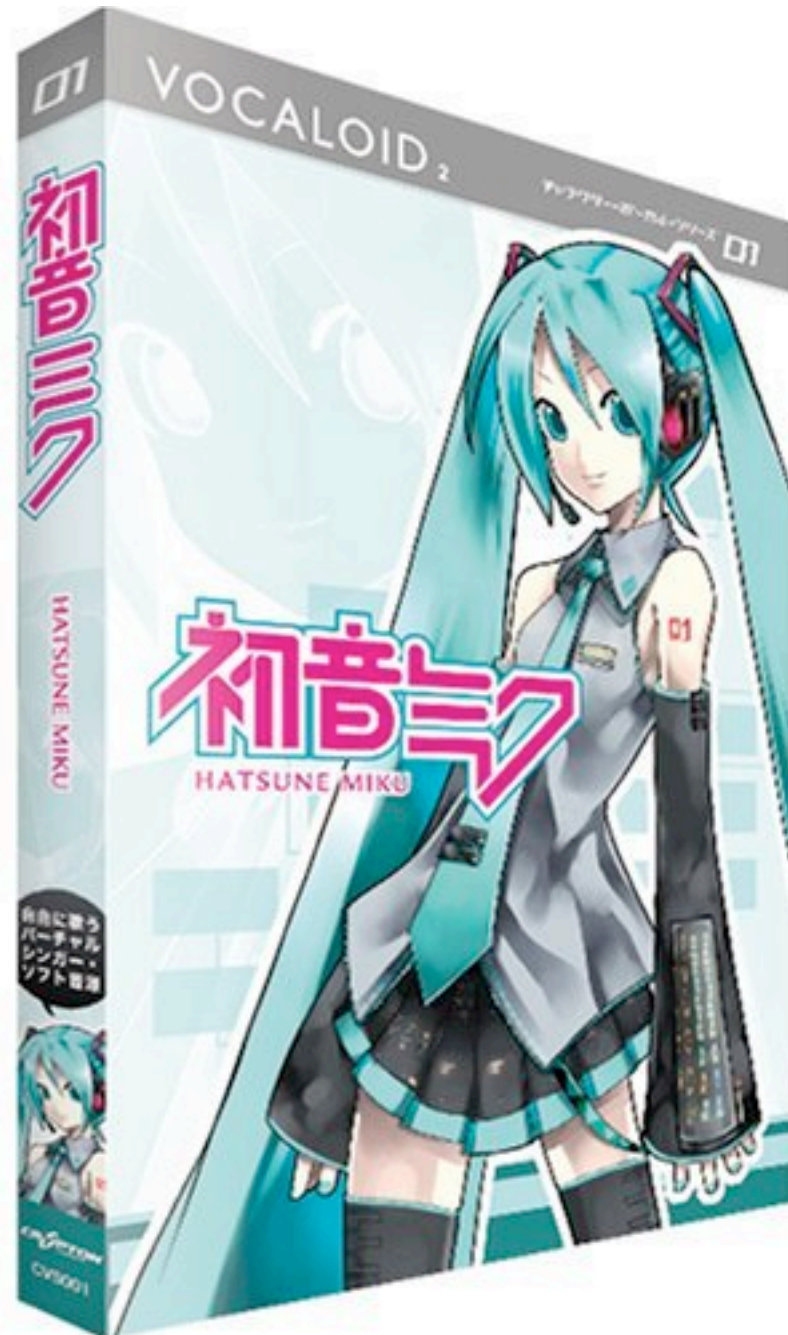
best friends [b e s t f r e n d z]

1: Sheet1 | 2: Sheet6 | 3: Sheet2 | 4: Sheet7 | 5: Sheet1 | 6: Sheet2

Brightness: VALUE 30 INTERVAL 30 [DOT] [FREE] [LINE]

VOCALOID Mixer

1	2	3	4	5	6	7	MASTER
MUTE	MUTE	MUTE	MUTE	MUTE	MUTE	MUTE	MUTE
SOLO	SOLO	SOLO	SOLO	SOLO	SOLO	SOLO	SOLO
L R	L R	L R	L R	L R	L R	L R	L R
-7.8	2.8	-1.0	-6.5	-26	-6.0	0.0	-3.5
Master...	Master...	Master...	Master...	Master...	Master...	Master...	MASTER Avance AC97...





ニコニコ動画(9)
NICO NICO DOUGA





とらのあな
限定販売



★先着特典★
フルカラー24P
ブックレット
付いてきます!

VOC@LOID GENERATION

ボカロに代わって歌ってみた
11.6 ONSALE

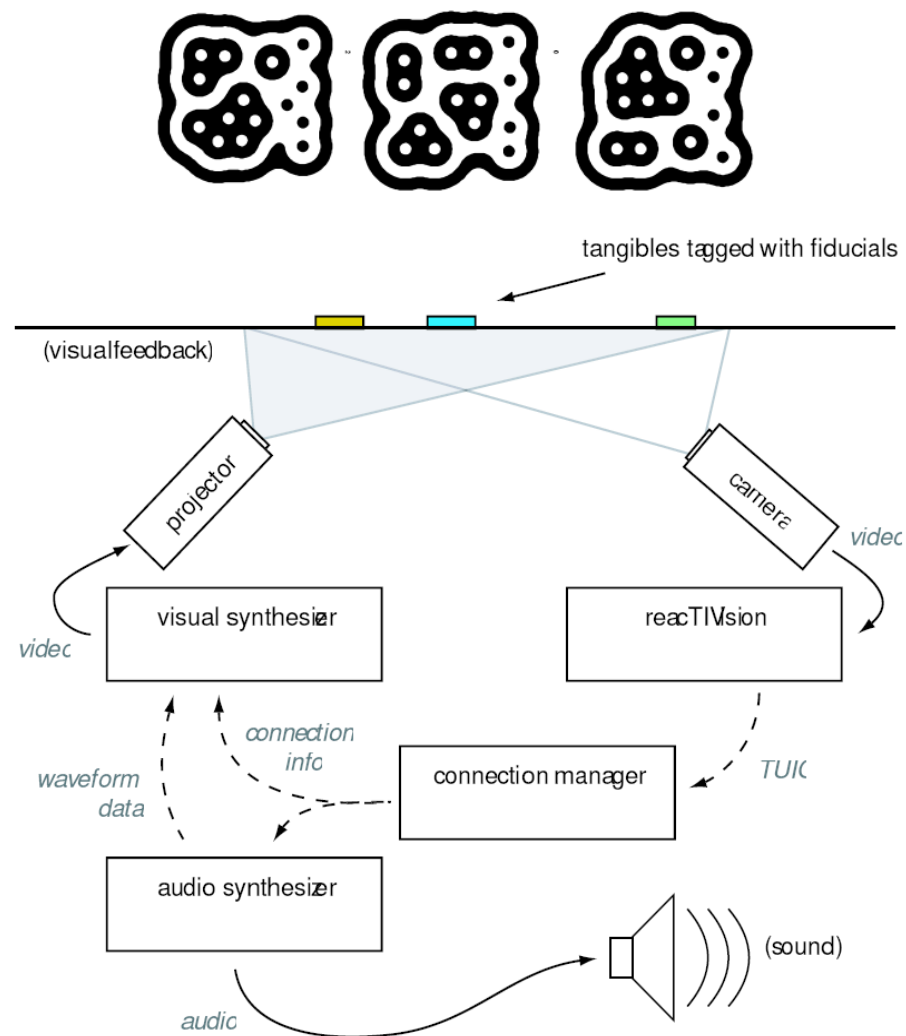
曲名	アーティスト	収録CD
1. 初音ミク	初音ミク	初音ミク
2. 巡音ルカ	巡音ルカ	巡音ルカ
3. 鏡音リン	鏡音リン	鏡音リン
4. 鏡音レン	鏡音レン	鏡音レン
5. 音街未来	音街未来	音街未来
6. 音街未来	音街未来	音街未来
7. 音街未来	音街未来	音街未来
8. 音街未来	音街未来	音街未来
9. 音街未来	音街未来	音街未来
10. 音街未来	音街未来	音街未来
11. 音街未来	音街未来	音街未来
12. 音街未来	音街未来	音街未来
13. 音街未来	音街未来	音街未来
14. 音街未来	音街未来	音街未来

■ 型式: CD-ROM (特装仕様箱入り) ■ 曲数: 16曲・Disc2枚組み ■ 価格: 3,000円(税込)



UTAU Kasane Teto Age:31 Height:159.5cm Weight:47kg	VOYAKILOID Yowane Haku Age:SEACRET! Height:163cm Weight:45kg	BOUKALOID Akita Neru Age:17 Height:150cm Weight:38kg	VOCALOID Meiko Height:165cm Weight:48kg (Unofficial)	VOCALOID2 CV-01 Hatsune Miku Age:16 Height:158cm Weight:42kg	UNKNOWN Hachune Miku Age:ERROR! Height:ERROR! Weight:ERROR!	VOCALOID2 CV-02 Kagamine Rin Age:14 Height:152cm Weight:43kg	VOCALOID2 CV-02 Kagamine Len Age:14 Height:156cm Weight:47kg	VOCALOID2 CV-03 Kaito Height:178cm Weight:65kg (Unofficial)
0401	DTM	DEN2		01	01	02	02	03

ReactTable: table-top instrument



Freesound.org

The screenshot shows the Freesound.org interface. At the top, there's a navigation bar with the site logo, user profile 'xserra', and links for Messages, Settings, Log Out, and Upload Sounds. Below this is a search bar and a secondary navigation bar with Home, Sounds, Forums, People, and Help. The main content area displays the sound 'Santur.wav' with a yellow waveform and a duration of 01:30:684. The uploader is 'xserra', dated July 26th, 2011, with 82 downloads. A description mentions Peyman Heydarian playing the Santur in London. A Creative Commons Attribution License is noted. A metadata table is provided below the description.

Type	Wave (.wav)
Duration	01:30:684
Filesize	15.3 MB
Samplerate	44100.0 Hz
Bitdepth	16 bit
Channels	Stereo

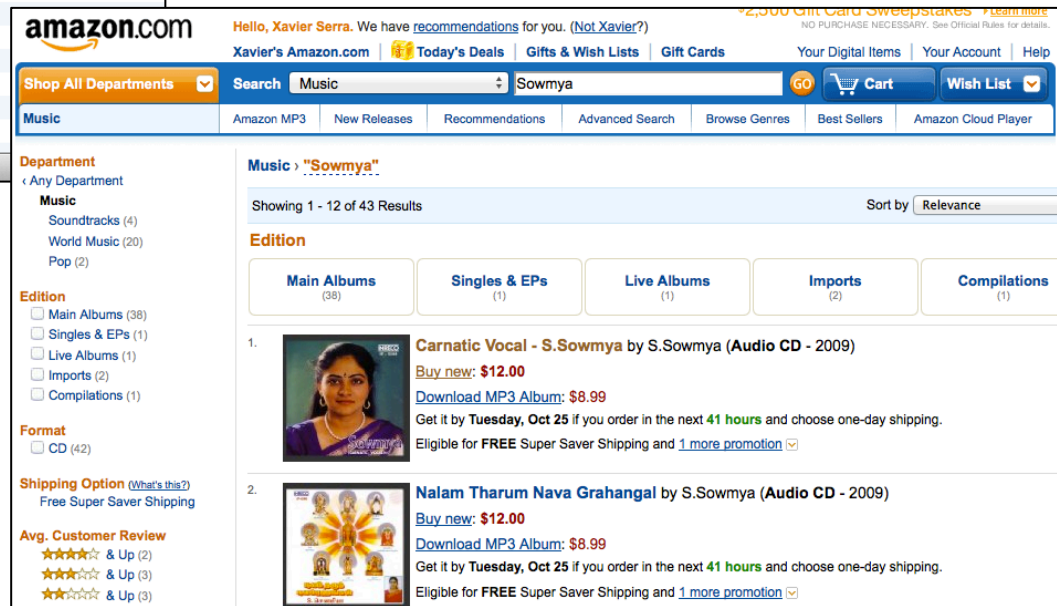
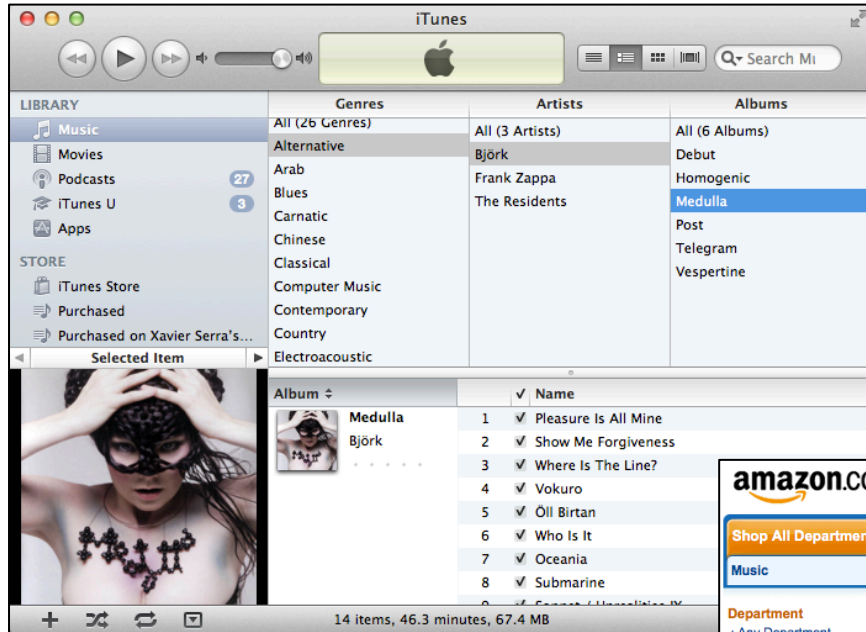


More than 130.000 sounds uploaded and
2 million registered users and around
35.000 visitors per day!!

Visit to India



IT for our world's music?



Music Information Technology

Data intensive processing for music applications.

- What data should we use to study a given musical repertoire/culture? How can it be made available for research?
- What information processing methodologies should we focus on for finding the specificities of a musical repertoire?
- What systems could be developed of relevance for specific cultures?



“**Computational Models for the Discovery of the World's Music**”

ERC Advanced Grant for 5 years

CompMusic Objectives

- Promote multicultural approaches in Music Information Technology.
- Work on information models for culture specific contexts. Characterize differences.
- Use as many types of information sources as possible (audio features, symbolic scores, text commentaries, user evaluations, ...).
- Use culture specific perspectives. Involve researchers immersed in the music cultures to be studied.

Musical repertoires

- India (Carnatic, Hindustani), Turkey (Ottoman), North Africa (Andalusian), China (Han).
- Classical traditions with alive performance practices and strong social and cultural relevance.
- Musicological and cultural studies available.
- A lot of “good” data available.

➔ **Possibility to challenge current western centred information paradigms.**

Carnatic music



IIT-Madras

- *Dr. Hema Murthy*
- Dr. R. Aravind
- S. Venkat Vikram
- Aswin Bellur
- Vikram Venkatesan
- TM Krishna



Sudha Raganathan 

Hindustani music



IIT-Bombay

- *Dr. Preeti Rao*
- Vinutha Prasad
- Joe Cheri Ross
- Amruta J. Vidwans



Ravi Shankar



Ottoman music



BAHÇEŞEHİR
ÜNİVERSİTESİ

- *Dr. Barış Bozkurt*
- Dr. Andre Holzapfel
- M. Kemal Karaosmanoğlu
- Utku Uzmen
- Okan Murat Ozturk



Andalusian music

Team TBD

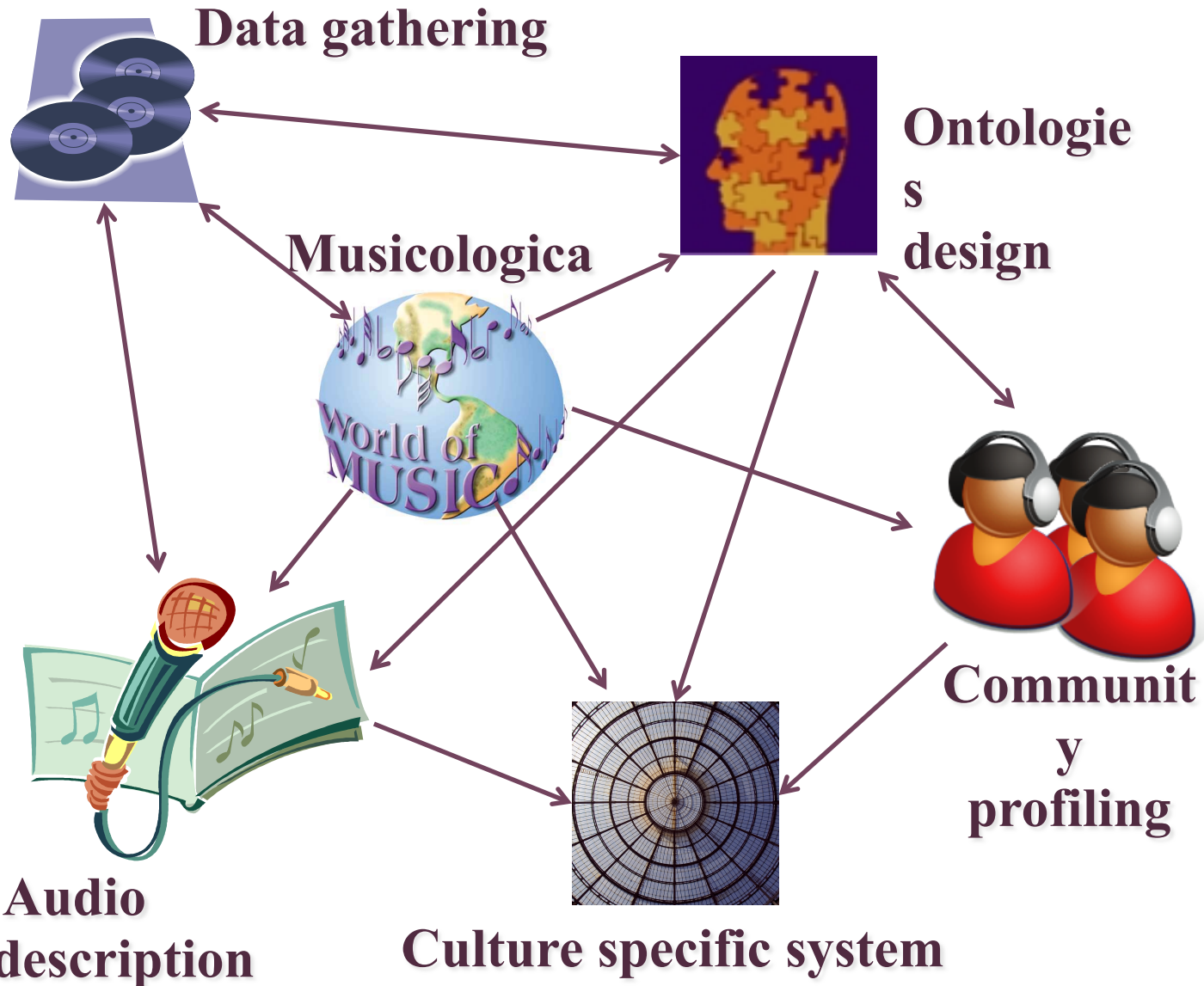


Han music

Team TBD



CompMusic tasks



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