

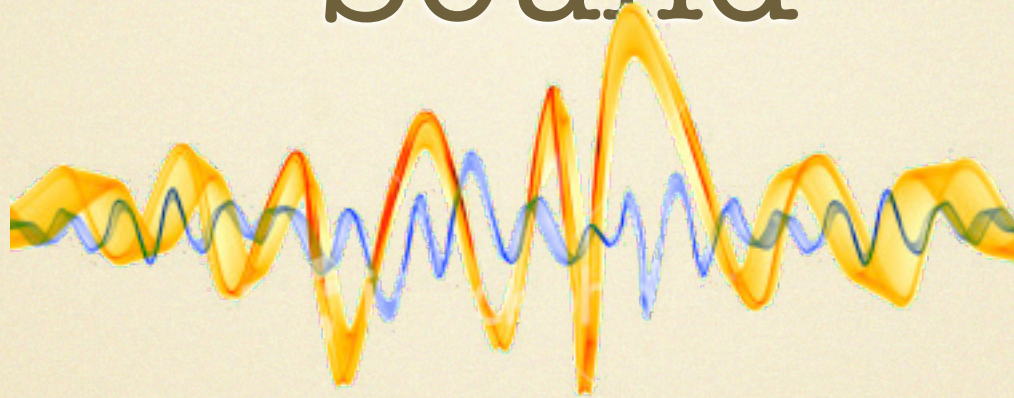
Computer Music

Hans Fugal

Music

- Organized sound
 - Melody
 - Rhythm
 - Loudness
 - Timbre

Sound



- Compression waves in the air
- We can recreate **any** sound with a computer
- We can synthesize entirely **new** sounds that you could never make with a physical instrument

Computer Music

- What can we do with computers?
 - Make music
 - Study music

Recording & Mastering

- Almost all recording today is digital
- Digital Signal Processing
 - Polish
 - Special effects

Synthesis

- Mimic physical instruments
- Make entirely new sounds
- Make new sounds by modifying recorded sounds

Analysis

- Answer questions about the music
 - What genre? Who is it?
 - Will it be popular?
 - What instruments are there?
- Find the melody, rhythm, chords, etc.
- Performance (score following, accompaniment)

Discography

- “Mad World” by Tears for Fears, covered by Michael Andrews and Gary Jules
- “Kommst du nun, Jesu, von Himmel herunter” BWV 650 by Johann Sebastian Bach, performed on Aeolus by Bert Visser
- “Goof” by Binärpilot
- “Silver Screen (Director’s Cut)” by KiloWatts & Vanek
- “My Secret Bliss” by Afro Celt Sound System

Links

- <http://ardour.org>
- <http://audacity.sf.net>
- <http://knobtwackers.net>
- <http://www.kokkinizita.net/linuxaudio/aeolus/>
- <http://realworldremixed.com>
- <http://hans.fugal.net/music>

Me

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