

10T1: Beyond Audio Signal Processing in Music Applications

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- Audio signal processing beyond this course
- Beyond audio signal processing

Audio signal processing beyond this course

- Detection/estimation of sinusoids
- Partial tracking
- Transient modeling
- Multi-resolution
- Residual analysis/modeling
- Synthesis of sinusoids and noise

- Other sound modeling approaches

Beyond audio signal processing

- Other music signals/data
 - Scores, lyrics
 - Gestures, video
 - Contextual and community information
- Data processing methods
 - Statistical analysis
 - Pattern analysis
 - Machine learning
- Semantic technologies
 - Network analysis
 - Ontologies
- User-centered studies
 - Perception and cognition
 - Human-computer interaction

References and credits

- <http://mtg.upf.edu/technologies/sms>
- “Roadmap for Music Information ReSearch”:
<http://mtg.upf.edu/node/2737>
- <http://en.wikipedia.org/wiki/Statistics>
- http://en.wikipedia.org/wiki/Machine_learning
- http://en.wikipedia.org/wiki/Knowledge_representation_and_reasoning
- http://en.wikipedia.org/wiki/Music_psychology
- http://en.wikipedia.org/wiki/Human-computer_interaction
- Slides released under CC Attribution-Noncommercial-Share Alike license and available from <https://github.com/MTG/sms-tools>

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