

# Music & the Internet

## MUMT 301

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# Plan

- **Music Scores**
- **Music Information Retrieval**

# Music Scores

- IMSLP
- List of Online Digital Musical Document Libraries (wikipedia)
- Liber Usualis
- Salzannes Manuscript
- Guitar tabs
  - Chordie
  - Ultimate Guitar
  - E-chords (Firefox)

# Online Music Editors

- Noteflight

# Music Information Retrieval (i)

- Similarity
- Recognition / Analysis / Classification
- Transcription and annotations
- Query
- Knowledge representation
- Human-computer interaction and interfaces
- Corpora and databases
- Socio-cultural aspects
- Intellectual property issues
- Evaluation of MIR systems

# Music Information Retrieval (ii)

- Similarity
  - Melody, timbre, rhythm, form, style, tempo, mood, etc.
- Recognition / Analysis / Classification
  - Instrument, timbre, singer identification
  - Structural analysis
  - Style analysis
    - recommendation system
    - playlist generation
  - Optical music recognition
- Knowledge Representation
  - Standards (metadata, audio file formats, symbolic, song / artist unique IDs)
  - Summarizations
  - Taxonomy (categorization: genre, tags, mood, etc.)
  - Indexing and metadata

# Music Information Retrieval (iii)

- Human-computer interaction and interfaces
  - Usability
  - Multi-modal user interfaces
  - Visualization tools
    - <http://musicmachinery.com/2009/03/23/the-loudness-war/>
    - <http://rama.inescporto.pt/app/>
    - <http://www.mikemake.com/#72772/Charting-the-Beatles>
  - Mobile applications
- Corpora and databases
  - Digital music libraries and archives
  - Text and web mining
  - Web services and APIs

# Music Information Retrieval (iv)

- Socio-cultural aspects
  - Business models
  - Music and cultural heritage valorization
  - Non-Western music
  - Personalization / privacy
- Intellectual property issues
  - Watermarking
  - Digital rights management
- Evaluations of MIR systems
  - User need and expectations
  - Building test collections (ground truth)
  - Experimental design
  - Metrics and benchmarks
  - MIREX: The Music Information Retrieval Evaluation eXchange
    - Annual evaluation campaign for MIR algorithm hosted by UIUC