

Indiana University Digital Music Library Project

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ABSTRACT

The Indiana University Digital Music Library project plans to create a digital library testbed system containing music in a variety of formats, designed to support research and education in the field of music and to serve as a platform for digital library research. Prototypes of user interfaces to the system will be demonstrated.

Categories and Subject Descriptors

J.5 [Arts and Humanities] – *performing arts*; H.3.7 [Information Storage and Retrieval]: Digital libraries – *collection, dissemination, systems issues, user issues*.

General Terms

Design.

Keywords

Music digital libraries, music instruction.

1. DEMONSTRATION SUMMARY

Major goals of the Indiana University Digital Music Library project [1], which began in October 2000, are:

- To establish a Digital Music Library (DML) testbed system containing music in a variety of formats, including sound recordings, musical scores, computer score notation files
- To develop applications for education and research in the field of music based on the collections and functions of the DML
- To use the DML as a foundation for digital library research in the areas of music instruction, usability, and intellectual property rights.

Key to the project is the interdisciplinary team of investigators, who represent the academic disciplines of information science, computer science, law, music theory and music education, as well as the professional disciplines of academic research libraries and information technology services. The project builds in part upon

experiences with a previous operational digital music library system at Indiana University known as VARIATIONS [2].

Testbed development is focused on three chief areas of research and development:

- System architecture, including content representation, metadata schema, and repository services
- Component-based application architecture, supporting the development of applications which make use of library content and services to meet unique needs of particular user communities
- Network services, to support delivery of DML services to users across local area networks, both commodity and high-performance wide area networks, and a variety of remote access network technologies.

Work on design and development of the testbed system is currently underway. We will demonstrate prototypes of the system, including:

- User interface components for search and retrieval, and presentation/navigation of music content in various forms
- User interface for authoring classroom presentations and independent lessons using content and services from the DML
- Prototype lessons making use of content and services from the DML (part of the associated Multimedia Music Theory Teaching project [3]).

2. ACKNOWLEDGMENTS

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3. REFERENCES

- [1] Digital Music Library project web site.
<http://dml.indiana.edu/>
- [2] Dunn, J. and Mayer, C. VARIATIONS: A Digital Music Library System at Indiana University. In *Proceedings of the Fourth ACM Conference on Digital Libraries*, Berkeley, California, 1999.
- [3] Multimedia Music Theory Teaching project web site.
<http://theory.music.indiana.edu/mmtt/>

