AV Description with AVPreserve & Indiana University

Strategies and tools to describe AV materials at scale for Indiana University's MDPI
MDPI: Media Digitization and Preservation Initiative

Goal: “To digitize, preserve and make universally available by IU’s Bicentennial—subject to copyright or other legal restrictions—all of the time-based media objects on all campuses of IU judged important by experts.”

https://mdpi.iu.edu/
2009 Media Preservation Survey

IUB

560,000+ audio, video, & film objects

50+ formats

80+ units

Actively degrading, obsolete formats, high risk of loss of content over next decade

15- to 20-year window to digitally preserve audio and video holdings
Digitization & Preservation: Phases

Pre-Digitization
- Inventory
- Catalog
- Prioritize
- Batch & Queue

Digitization
- Memnon
  - Massive parallel digitization
- IU Operation
  - Unique/highly vulnerable digitization
  - Quality control

Discovery & Access
- Metadata
- Rights issues
- Technical aspects

Digital Preservation & Storage
- Metadata
- Technical infrastructure
- Ongoing monitoring & migration

https://mdpi.iu.edu/
Audio Item

Library catalog record

Unidentified segments
Video Item

Little descriptive metadata

Info packed in title field

Also unidentified segments
Research and Outcomes
Methodology
Phased approach
Multiple systems
Integrated workflows
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<th>Physical description</th>
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<td>Notes</td>
<td>Type of Resource</td>
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**Phase One Goals**
1) Required and prioritized fields
2) Workflow triggers
3) Rights & access

**Phase Two**
1) Phase One metadata fields
2) Unstructured & structured text
3) Unstructured -> structured

**Phase Three**
1) Phases One & Two fields
2) Triangulate
3) Fields of value to one or more units

Minimize complexity/costs
Maximize implementation
Phase One MGMs

- Commercial content identification
- Human generation
- Human transcription
- Legacy closed caption recovery
- Legacy date/time & timecode capture
- Memnon output
- Music vs speech detection
- Queried/Imported data sets
- Segmentation
- Shipping manifest (POD)
- Silence detection
- Tech-embedded metadata

Phase Two

- Facial recognition
- Linked data
- Named entity recognition
- Natural language processing
- Paper & video OCR
- Phoneme analysis
- Speech to text
- Subtitle recovery
- Speech-to-text comparison & weighting

Phase Three

- Artificial intelligence
- Audio frequency analysis
- Beats per minute detection
- Chroma analysis
- Content matching
- Genre detection
- Speaker identification
Considerations

- Multiple, phased & simultaneous integrated workflows
- Human input & automation work in tandem
- Endless possibilities
MDPI Next Steps

Phase 0.5 - MDPI Access Workflows Task Force

Workflow for items with library catalog record info
And rights

Workflow for collections with library catalog record info and EAD (finding aids)
And rights

Recommend changes to systems to support new workflows

Recommend software for tracking rights and access decisions

Recommend staffing needs
MDPI Next Next Steps

Find collaborators

Find grant funding

Find a way to implement Phases 1-3!
Thank you!

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