# **Digital Media Encoding for Sound and Moving Images** $\Pi\Pi:\Pi\Pi:\Pi$

#### **IJS Matrox Video Encoder**

RUL Cabinet Meeting – Tuesday, November 7, 2006

Presented by the RUcore Multimedia Standards Working Group











## Overview

- Equipment review, and why we need it
- Capabilities and Advantages

- Current projects
  - Video Demos
- Future Concepts and Possibilities

Q&A





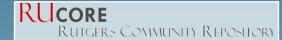
#### Equipment review

#### The Matrox Axio encoder system

- High performance computing workstation
- Encoder hardware
  - Installed inside workstation



- "Breakout Box"
  - Adaptable to multiple A/V inputs and outputs





### Equipment review

#### The Matrox Axio encoder system

- Can create multiple digital formats
  - RealPlayer
  - Quicktime
  - Flash Video (i.e. Google Video)



- Processed video can be sent back to DVD or Tape.
- Cost: Approx. \$62,000



### Preservation-Grade Digital Video

 Can create high-quality, digitized video out of many different analog or digital formats, with minimal or no loss in quality





#### Preservation-Grade Digital Video

 The system can meet our exacting demands for preservation-level video.

 Most "MovieMaker" packages for home computers produce lower-quality video, which is fine for personal home movies, but not for long-term preservation.





### Preservation-Grade Digital Video

Uncompressed Digital Video can take as much as 1GB of hard drive space per minute!

(Even more space is required for High Definition content)

 Most current typical computers cannot process that much data.





#### Preservation-Grade Digital Video

To meet the challenge of preserving Moving Images, we needed a system that offers:

- Lots of hard drive space
- Heavy number-crunching ability
- Able to "speak" the many different languages of moving images: S/VHS, DV, and inputs for analog film-to-digital.





#### Preservation-Grade Digital Video

The Matrox Axio encoder meets the technical requirements needed to handle uncompressed video.





#### Current/Planned Projects

#### What have we been working on?

- New Jersey Digital Highway
  - American Labor Museum Oral Histories & Interviews
  - Seabrook Farms Presentation on WWII Experiences
- Institute of Jazz Studies
  - Jazz Oral History Project (audio)
- Dana Library
  - Interview and presentations on art demos



Video Object Demos



#### Possibilities for the Future

#### Video distribution to mobile devices











iPod

Matrox

Video anywhere!



#### Possibilities for the Future

#### **Preserving our Analog Film Collection**



**Analog Film** 



Matrox



Digitally Preserved Movies



### Possibilities for the Future

#### Interdepartmental collaboration







Other departments create.

We store, preserve and make accessible.

Video encoding and preservation



One piece that fits many collection puzzles.

RUCORE RUIGERS COMMUNITY REPOSITORY

Questions?