Enabling the IIHS Vision, Part 1

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Peter Wilkins—Our colleague at MIT at 0° C

January 2010
2 Demos For January 2010

- **SpokenMedia**
  - Video/audio transcription, enabling translation
  - Process and tools
  - “Access to high-quality learning must be open to all”

- **Open IIHS Experience**
  - Course/activity design; student interaction
  - “Make curriculum openly available”
“The IIHS Website is our commitment to a different way of looking at things.”

– Aromar Revi
5 January 2010
“The Institution will fail or scale based on language.”

– Aromar Revi
5 January 2010
Our Goals with this Demo

- Demonstrate transcripts and translations of IIHS videos
- Describe the process and our experiences
  - Transcribe -> Edit -> Translate -> Present
What did we do?

Auto Transcribe → Edit → Translate → Present

SpokenMedia
I think one central challenge of planning is the legitimacy of government as a key institution that should be involved in bringing the change. The legitimacy of the government is under attack in many different parts of the world so that it has to be reestablished as a major planning institution. I think the second challenge for planning at least in the US or the west is that the market is...
How did we do it?

Auto Transcribe → Edit → Translate → Present

SpokenMedia
How do we do it?
Lecture Transcription

- Spoken Lecture: research project
- Speech recognition & automated transcription of lectures
- Why lectures?
  - Conversational, spontaneous, starts/stops
  - Different from broadcast news, other types of speech recognition
  - Specialized vocabularies

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Spoken Lecture Project

• **Processor, browser, workflow**
  • Prototyped with lecture & seminar video
    – MIT OCW (~300 hours, lectures)
    – MIT World (~80 hours, seminar speakers)

Supported with iCampus MIT/Microsoft Alliance funding
How Does it Work?
Lecture Transcription Workflow
We used a portion of the SpokenMedia process for the demo
How did we do it?

SpokenMedia
<table>
<thead>
<tr>
<th>Automatic Transcription</th>
<th>Hand Transcription</th>
<th>Time Adjusted</th>
<th>Translated Hindi</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
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<td>I</td>
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<td>सरकार की एक ऐसी मुख्य संस्थान के रूप में वैधता</td>
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</table>
SpokenMedia Accuracy Potential

- **Accuracy**
  - Domain Model and Speaker Model
  - Internal validity measure
  - Seed with transcript

- **Ongoing research by Jim Glass and his team @ MIT**
How did we do it?

Auto Transcribe → Edit → Translate → Present

SpokenMedia
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Check it out for yourself

- Demo site:

  http://oki-dev.mit.edu/spokenmedia

  all the videos from IIHS website…it’s not just Bish!
Thank You!

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