Collaborative correction of Speech recognition captioning errors of lecture recordings

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Captioning/Subtitling

• Required for access to spoken word
  – Deaf/hearing impaired listeners
  – No audio available
  – Non native speakers
Captioning/Subtitling

• Human captioning is expensive
  – e.g. 150 Euro/hour

• Automatic SR Captioning produces errors
  – 15%-30% errors typically for speaker independent SR
  – Can’t automatically reliably detect errors

What is Sustainable Solution for Education?
Crowdsourcing Captioning

- Collaborative correction of SR errors
- Compare corrections for verification
- Motivation?
  - Altruism
  - Rewards
• Award winning annotation system
• Manual or automatic SR Captioning
• Corrections by one user removes previous correction by others

No verification of corrections?
No ‘scoring’ of corrections for motivation?
And you want me to finish at quarter to is that correct. Yeah right. Yeah. Okay thanks. Hi.

I'm not on the phone or anything I have been asked to wear this weird thing because

He's recording it so. It feels a bit strange but I can see it out of the corner of my eyes is going to be

A bit weird for me this okay so I'm from an organization called OSSwatch and we provide advice and

Guidance about open source to the higher and further education sector and I'm also a vice president

Of the apache software foundation. Who produce an awful lot of open source software

So just so I know who I'm talking to how many people here

Think that they know what open source software is. Okay. How many
• Verification by comparing corrections

• Once verified no further correction allowed

• Motivation through ‘scoring’
How do you wish to split the utterances?

- by Number of Words
- by Utterance Length
- by Pause Length
- by Comma

Number of words: 

Additional Options:

- Keep Commas
- Remove Commas
- Convert Commas to Full Stops
- Capitalise First Letter

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- **Title:**
- **Media File (url):**
- **Transcript File:**

### Permissions

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### Matching and Scoring Algorithms

- **Editing Method:**
  - Everything
  - Sections

- **Minimum number of users editing one section:**

- **Minimum number of utterances assigned to a single user:**

- **Matching Method:**
  - Exact
  - Close
  - Mixed

- **Number of edits that must be stored before matching starts:**

- **Required minimum similarity of edits (in percent):**

- **Minimum number of similar edits to make utterance final:**

- **Scoring Method:**
  - Rewards only
  - Rewards and Penalties
A bit word for me this okay so I'm from an organization called OSSwatch and we provide advice and

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Of the apache software foundation. Who produce an awful lot of open source software new

So just so I know who I'm talking to how many people have

Think that they know what open source software is. Okay. How many people have
Motivation through ‘scoring’

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Questions?