

Computational Approaches for Documenting and Analyzing Oral Languages

Special Poster Session at the ICPHS 2019 in Melbourne

The special session **Computational Approaches for Documenting and Analyzing Oral Languages** welcomes submissions presenting innovative speech data collection methods and/or assistance for linguists and communities of speakers: methods and tools that facilitate collection, transcription and translation of primary language data. Oral languages is understood here as referring to spoken vernacular languages which depend on oral transmission, including endangered languages and (typically low-prestige) regional varieties of major languages.

The special session intends to provide up-to-date information to an audience of phoneticians about developments in machine learning that make it increasingly feasible to automate segmentation, alignment or labelling of audio recordings, even in less-documented languages.

Model	Accuracy
Baseline	15.11
Ours	29.47
Baseline	29.05
Ours	27.81
Baseline	21.97
Ours	33.32
Baseline	18.91
Ours	58.82

/ Main topics

- large-scale phonetics of oral languages,
- automatic phonetic transcription (and phonemic transcription),
- mobile platforms for speech data collection,
- creating multilingual collections of text, speech and images,
- machine learning over these collections,
- open source tools for computational language documentation,
- position papers on computational language documentation.

/ Organizers

Laurent Besacier - *LIG UGA (France)*
 Alexis Michaud - *LACITO CNRS (France)*
 Martine Adda-Decker - *LPP CNRS (France)*
 Gilles Adda - *LIMSI CNRS (France)*
 Steven Bird - *CDU (Australia)*
 Graham Neubig - *CMU (USA)*
 François Pellegrino - *DDL CNRS (France)*
 Sakriani Sakti - *NAIST (Japan)*
 Mark Van de Velde - *LLACAN CNRS (France)*



/ Endorsement

This special session is endorsed by SIGUL (Joint ELRA and ISCA Special Interest Group on Under-resourced Languages)