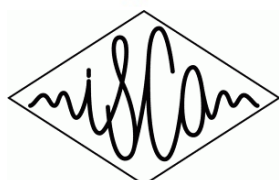




Organizer

Sakriani Sakti, *NAIST, Japan*
 Laurent Besacier, *LIG, France*
 Oddur Kjartansson, *Google, UK*
 Kristiina Jokinen, *Uni-Helsinki, Finland*
 Alexey Karpov, *SPIIRAS, Russia*
 Charl van Heerden, *TensorAI, S. Africa*
 Shyam Agrawal, *KIIT, India*



Interspeech 2017 Special Session

Digital Revolution for Under-resourced Languages (DigRevURL)

Wednesday, 23 August 2017

The digital revolution is having an increasingly large impact on many aspects of our daily lives, and is creating a new way of communication and socialization. However, despite all the hype about how the digital revolution could connect the world, currently, it only covers a small portion of the world's languages. There are, however, more than 6000 languages and most of them have not benefited from this revolution yet. And even languages with millions of speakers can lack the resources needed to construct spoken and language technologies.

This special session aims to accelerate the research activities for under-resourced languages, and to provide a forum for linguistic and speech technology researchers, as well as academic and industrial counterparts to share achievements and challenges in all areas related to natural language processing and spoken language processing of under-resourced languages, mainly used in:

- South, Southeast and West Asia
- North and Sub-Saharan Africa
- Northern and Eastern Europe

The technical program will be held on **23 August 2017**, which consists of three consecutive sessions:

Time	Room	Type	Chair	Presentation
10:00-12:00	A2	ORAL	Alexey Karpov & Kristiina Jokinen	6 IS Regular Papers
13:30-15:30	Poster Area1	POSTER	Shyam Agrawal & Oddur Kjartansson	16 IS Regular Papers + 9 Invited Posters
16:00-18:00	A2	PANEL DISCUSSION	Joseph Mariani & Sakriani Sakti	12 Panelists

In the panel discussion, various institutions that have been working on under-resourced languages will come together to discuss the "Digital Revolution for Under-Resourced Languages".

Oral Session

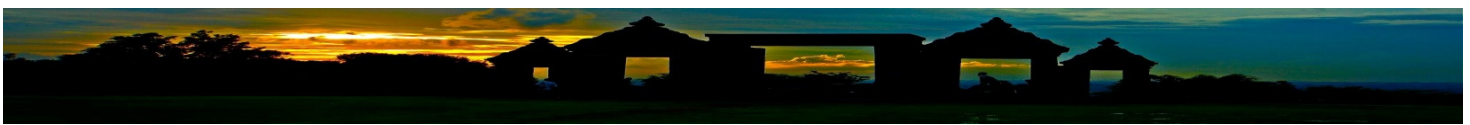
Wednesday, 23 August 2017, 10:00-12:00, Room A2

Type	Title	Authors
IS Regular Paper	Team ELISA System for DARPA LORELEI Speech Evaluation 2016	Pavlos Papadopoulos, Ruchir Travadi, Colin Vaz, Nikolaos Malandrakis, Ulf Hermjakob, Nima Pourdamghani, Michael Pust, Boliang Zhang, Xiaoman Pan, Di Lu, Ying Lin, Ondrej Glembek, Murali Karthick B, Martin Karafiat, Lukas Burget, Mark Hasegawa-Johnson, Heng Ji, Jonathan May, Kevin Knight, Shrikanth Narayanan
	First Results in Developing a Medieval Latin Language Charter Dictation System for the East-Central Europe Region	Peter Mihajlik, Lili Szabo, Balazs Tarjan, Andras Balog, Krisztina Rabai
	The motivation and development of MPAi, a Māori Pronunciation Aid	Catherine Watson, Peter Keegan, Margaret MacLagan, Ray Harlow, Jeanette King
	On the Linguistic Relevance of Speech Units Learned by Unsupervised Acoustic Modeling	Siyuan Feng, Tan Lee
	Deep Autoencoder Based Multi-task Learning Using Probabilistic Transcriptions	Amit Das, Mark Hasegawa-Johnson, Karel Vesely
	Areal and Phylogenetic Features for Multilingual Speech Synthesis	Alexander Gutkin, Richard Sproat

Poster Session

Wednesday, 23 August 2017, 13:30-15:30, Room Poster Area1

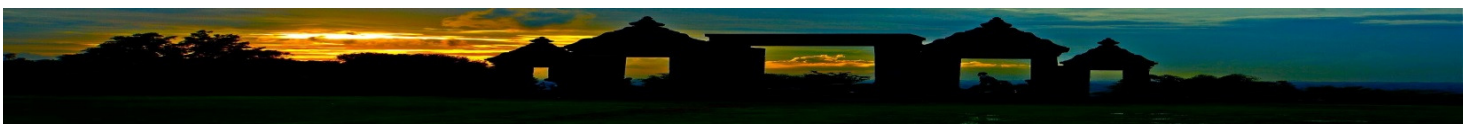
Type	Title	Authors
IS Regular Paper	The ABAIR initiative: Bringing Spoken Irish into the Digital Space	Ailbhe Ní Chasaide, Neasa Ní Chiaráin, Christoph Wendler, Harald Berthelsen, Andy Murphy, Christer Gobl
	Very low resource radio browsing for agile developmental and humanitarian monitoring	Armin Saeb, Raghav Menon, Hugh Cameron, William Kibira, John Quinn, Thomas Niesler
	Extracting Situation Frames from non-English Speech: Evaluation Framework and Pilot Results	Nikolaos Malandrakis, Ondrej Glembek, Shrikanth Narayanan
	Eliciting meaningful units from speech	Daniil Kocharov, Tatiana Kachkovskaia, Pavel Skrelin
	Unsupervised Speech Signal to Symbol Transformation for Zero Resource Speech Applications	Saurabhchand Bhati, Shekhar Nayak, Sri Rama Murty Kodukula
	Machine Assisted Analysis of Vowel Length Contrasts in Wolof	Elodie Gauthier, Laurent Besacier, Sylvie Voisin
	Leveraging Text Data for Word Segmentation for Underresourced Languages	Thomas Glarner, Benedikt Boenninghoff, Oliver Walter, Reinhold Haeb-Umbach



Poster Session

Wednesday, 23 August 2017, 13:30-15:30, Room Poster Area1

Type	Title	Authors
IS Regular Paper	Improving DNN Bluetooth Narrowband Acoustic Models by Cross-bandwidth and Cross-lingual Initialization	Xiaodan Zhuang, Arnab Ghoshal, Antti-Veikko Rosti, Matthias Paulik, Daben Liu
	Joint Estimation of Articulatory Features and Acoustic models for Low-Resource Languages	Basil Abraham, Srinivasan Umesh, Neethu Mariam Joy
	Transfer Learning and Distillation Techniques to Improve the Acoustic Modeling of Low Resource Languages	Basil Abraham, Tejaswi Seeram, Srinivasan Umesh
	Building an ASR corpus using Althingi's Parliamentary Speeches	Inga Rún Helgadóttir, Róbert Kjaran, Anna Björk Nikulásdóttir, Jon Gudnason
	Implementation of a Radiology Speech Recognition System for Estonian using Open Source Software	Tanel Alumäe, Andrus Paats, Ivo Fridolin, Einar Meister
	Building ASR corpora using Eyra	Jon Gudnason, Matthías Pétursson, Róbert Kjaran, Simon Kluepfel, Anna Nikulásdóttir
	Rapid development of TTS corpora for four South African languages	Daniel Van Niekerk, Charl Van Heerden, Marelise Davel, Neil Kleynhans, Oddur Kjartansson, Martin Jansche, Linne Ha
	Uniform Multilingual Multi-Speaker Acoustic Model for Statistical Parametric Speech Synthesis of Low-Resourced Languages	Alexander Gutkin
	Nativization of foreign names in TTS for automatic reading of world news in Swahili	Joseph Mendelson, Pilar Oplustil, Oliver Watts, Simon King
Invited Poster	ISCA/ELRA Special Interest Group: Under-resourced Languages (SIG-UL)	Claudia Soria, Laurent Besacier, Sakriani Sakti, Khalid Choukri, Thierry Declerck, Vera Ferreira, Mikel Forcada, John Judge, Joseph Mariani
	Past and Future of SLTU: International Workshop on Spoken Language Technologies for Under Resourced Languages	Alexey Karpov, Sakriani Sakti, Shyam Agrawal, Laurent Besacier, Pascal Nocera, Eric Castelli, Tan Tien Ping, Etienne Barnard, Charl van Heerden
	Zero Resource Speech Challenge	Ewan Dunbar, Xuan Nga Cao, Juan Benjumea, Julien Karadyi, Mathieu Bernard, Laurent Besacier, Xavier Anguerra, Emmanuel Dupoux
	BABEL: Building Speech Recognition for Keyword Search in a New Language in a Week with Limited Training Data	Mary Harper, Kate Knill
	Innovative Technologies for Under-Resourced Language Documentation: The BULB Project	Sebastian Stüker, Gilles Adda, Martine Adda-Decker, Odette Ambouroue, Laurent Besacier, David Blachon, Hélène Bonneau- Maynard, Elodie Gauthier, Pierre Godard, Fatima Hamlaoui, Dmitry Idiatov, Guy-Noël Kouarata, Lori Lamel, Emmanuel-Moselly Makasso, Markus Müller, Annie Rialland, Mark Van de Velde, François Yvon, Sabine Zerbian
	Digital Citizens - Linguistic support for Finno-Ugric digital communities in generating online content	Kristiina Jokinen, Graham Wilcock, Trung Ngo Trung, Tamás Váradi, Eszter Simon
	John-Hopkins Summer Workshops	Sanjeev Khudanpur
	Google Research	Linne Ha
	UNESCO: World Atlas of Languages	Irmgarda Kasinskaite-Buddeberg



Panel Discussion

Wednesday, 23 August 2017, 16:00-18:00, Room A2

Type	Title	Panelists
Invited Panelists	ISCA/ELRA SIG-UL	Sakriani Sakti (NAIST, Japan) / Valérie Mapelli (ELRA, France)
	SLTU Board	Alexey Karpov (SPIIRAS/ITMO, Russia)
	Zero Resource Speech Challenge	Emmanuel Dupoux (EHESS, France)
	BABEL Program	Kate Knill (Uni-Cambridge, UK)
	LORELEI Program	Shri Narayanan (USC, USA)
	BULB Project	Sebastian Stüker (KIT, Germany)
	John-Hopkins Summer Workshops	Sanjeev Khudanpur (JHU, USA)
	Google Research	Linne Ha (Google, USA)
	UNESCO	Irmgarda Kasinskaite-Buddeberg (UNESCO, France)
	European Region Representative	Marja-Liisa Olthuis (Uni-Oulu, Finland)
	African Region Representative	Ulrike Janke (NWU, South Africa)
	Asian Region Representative	Shyam Agrawal (KIIT, India)

