

TECHNICAL PROGRAM

Day1: May 9, 2016

Two Parallel Tutorials:

ASR-Kaldi (Sanjeev Khudanpur) and TTS-Festival (Richard Sproat)

- 08:00-09:00 Registration of participants
09:00-10:30 **Tutorial Part I**
10:30-11:00 **Coffee Break**
11:00-12:00 **Tutorial Part II**
12:00-13:30 **Lunch**
13:30-15:30 **Tutorial Part III**
15:30-16:00 **Coffee Break**
16:00-18:30 **Tutorial Part IV**
19:00-22:00 **Welcome Reception at Hotel Phoenix with Gamelan Javanese Traditional Music**

Day2: May 10, 2016

- 08:00-09:00 Registration of participants
09:00-09:15 Workshop Opening
09:15-10:15 **Keynote Speaker: Steven Bird – Uni-Melbourne, Australia**
[Chair: Laurent Besacier]
10:15-10:40 **Coffee Break**
10:40-12:20 **Oral session: “DATA COLLECTION, CROWDSOURCING & SPEECH SYNTHESIS”**
[Chair: Shyam Agrawal]

5 Talks - 100min (each 20min; approx. 15min presentation + 5min Q&A)

1. BREAKING THE UNWRITTEN LANGUAGE BARRIER: THE BULB PROJECT
Gilles Adda, Sebastian Stüker, Martine Adda-Decker, Odette Ambourou, Laurent Besacier, David Blachon, H  l  ne Bonneau-Maynard, Pierre Godard, Fatima Hamlaoui, Dmitry Idiatov, Guy-No  l Kouarata, Lori F. Lamel, Emmanuel-Moselly Makasso, Annie Rialland, Mark Van de Velde, Fran  ois Yvon and Sabine Zerbian.
2. STUDY OF LARGE DATA RESOURCES FOR MULTILINGUAL TRAINING AND SYSTEM PORTING
Frantisek Grezl, Ekaterina Egorova and Martin Karafiat.
3. MISMATCHED CROWDSOURCING BASED LANGUAGE PERCEPTION FOR UNDER-RESOURCED LANGUAGES
Wenda Chen, Mark Hasegawa-Johnson and Nancy Chen.
4. PERFORMANCE IMPROVEMENT OF PROBABILISTIC TRANSCRIPTIONS WITH LANGUAGE-SPECIFIC CONSTRAINTS
Xiang Kong, Preethi Jyothi and Mark Hasegawa-Johnson.
5. BUILDING STATISTICAL PARAMETRIC MULTI-SPEAKER SYNTHESIS FOR BANGLADESHI BANGLA
Alexander Gutkin, Linne Ha, Martin Jansche, Oddur Kjartansson, Knot Pipatsrisawat and Richard Sproat.

- 12:20-13:30 **Lunch**
13:30-14:30 **Keynote Speaker: Ming Kuok Lim – UNESCO, Indonesia**
[Chair: Gilles Adda]
14:30-16:10 **Oral session: “SIGN LANGUAGE & NATURAL LANGUAGE PROCESSING”**
[Chair: Tan Tien Ping]
5 Talks - 100min (each 20min; approx. 15min presentation + 5min Q&A)

1. A STUDY OF STATISTICAL MACHINE TRANSLATION METHODS FOR UNDER RESOURCED LANGUAGES
Win Pa Pa, Ye Kyaw Thu, Andrew Finch and Eiichiro Sumita
2. EXPLOITING SYNTACTIC SIMILARITIES FOR PREPOSITION ERROR CORRECTIONS ON INDONESIAN SENTENCES WRITTEN BY SECOND LANGUAGE LEARNERS
Budi Irmawati, Hiroyuki Shindo and Yuji Matsumoto.
3. INDONESIAN NAMED ENTITY RECOGNITION FOR 15 CLASSES USING ENSEMBLE SUPERVISED LEARNING
Aditya Satrya Wibawa and Ayu Purwarianti
4. TOPIC SUMMARIZATION OF MICROBLOG DOCUMENT IN BAHASA INDONESIA USING THE PHRASE REINFORCEMENT ALGORITHM
Meganingrum Arista Jiwanggi and Mirna Adriani.
5. AUTOMATIC TECHNOLOGIES FOR PROCESSING SPOKEN SIGN LANGUAGES
Alexey Karpov, Irina Kipyatkova and Milos Zelezny.

16:10-16:35

Coffee Break

16:35-18:15

Oral session: “ZERO RESOURCES SCENARIO”

[Chair: Martine Adda-Decker]

5 Talks - 100min (each 20min; approx. 15min presentation + 5min Q&A)

1. THE ZERO RESOURCE SPEECH CHALLENGE 2015: PROPOSED APPROACHES AND RESULTS
Maarten Versteegh, Xavier Anguera, Aren Jansen and Emmanuel Dupoux.
2. UNSUPERVISED LINEAR DISCRIMINANT ANALYSIS FOR SUPPORTING DPGMM CLUSTERING IN THE ZERO RESOURCE SCENARIO
Michael Heck, Sakriani Sakti and Satoshi Nakamura.
3. VARIATIONAL INFERENCE FOR ACOUSTIC UNIT DISCOVERY
Lucas Ondel, Lukas Burget and Jan Cernocky.
4. REFINING SPARSE CODING SUB-WORD UNIT INVENTORIES WITH LATTICE-CONSTRAINED VITERBI TRAINING
Wiehan Agenbag and Thomas Niesler.
5. AUTOMATIC SYLLABLE SEGMENTATION USING BROAD PHONETIC CLASS INFORMATION
Bogdan Ludusan and Emmanuel Dupoux.

18:15-

Free Time

Day3: May 11, 2016

08:00-09:15

Registration of participants

09:15-10:15

Keynote Speaker: Stavros Tsakalidis – BBN, USA

[Chair: Thomas Niesler]

10:15-10:40

Coffee Break

10:40-11:40

Oral session: “DEEP NEURAL NETWORK”

[Chair: Sanjeev Khudanpur]

3 Talks - 60min (20min each; approx. 15min presentation + 5min Q&A)

1. BOTTLE-NECK FEATURE EXTRACTION STRUCTURES FOR MULTILINGUAL TRAINING AND PORTING
Frantisek Grezl and Martin Karafiat.
2. USING WEIGHTED MODEL AVERAGING IN DISTRIBUTED MULTILINGUAL DNNs TO IMPROVE LOW RESOURCE ASR
Reza Sahraeian and Dirk Van Compernelle.
3. INVESTIGATING BILINGUAL DEEP NEURAL NETWORKS FOR AUTOMATIC RECOGNITION OF CODE-SWITCHING FRISIAN SPEECH
Emre Yilmaz, Henk Van Den Heuvel and David Van Leeuwen

11:40-12:20

Short presentation for Poster

[Chair: Dessi Puji Lestari]

12 Posters - 40min (each approx. 3min)

12:20-13:30

Lunch

13:30-15:10

Poster session (12 Posters - 100 min)

[Chair: Dessi Puji Lestari]

Board Size: 1m width x 2.5m height; Recommended to use A0 poster size (Portrait style)

1. DEVELOPING SPEECH RESOURCES FROM PARLIAMENTARY DATA FOR SOUTH AFRICAN ENGLISH
Febe de Wet, Jaco Badenhorst and Thipe Modipa.
2. EYRA - SPEECH DATA ACQUISITION SYSTEM FOR MANY LANGUAGES
Matthias Petursson, Simon Klüpfel and Jon Gudnason.
3. PARALLEL SPEECH COLLECTION FOR UNDER-RESOURCED LANGUAGE STUDIES USING THE LIG-AIKUMA MOBILE DEVICE APP
David Blachon, Elodie Gauthier, Laurent Besacier, Guy-Noël Kouarata, Martine Adda-Decker and Annie Rialland.
4. COLLABORATIVE SPEECH DATA ACQUISITION FOR UNDER RESOURCED LANGUAGES THROUGH CROWDSOURCING
Sunita Arora, Karunesh Kumar Arora, Mukund Kumar Roy, B K Murthy and Shyam Sunder Agrawal
5. THE DEVELOPMENT OF AN AUDIBLE PATTANI MALAY-THAI ELECTRONIC PHRASEBOOK FOR MILITARY PURPOSES
Prachya Boonkwan, Thepchai Supnithi, Wandee Tosuwan and Chai Wutiwiwatchai.
6. USING DICTIONARY AND LEMMATIZER TO IMPROVE LOW RESOURCE ENGLISH-MALAY STATISTICAL MACHINE TRANSLATION SYSTEM
Yin Lai Yeong, Tien-Ping Tan and Siti Khaotijah Mohammad.
7. DICTIONARY BASED WORD SEGMENTATION FOR JAVANESE
Dipta Tanaya and Mirna Adriani.
8. A TOOL TO SOLVE SENTENCE SEGMENTATION PROBLEM ON PREPARING SPEECH DATABASE FOR INDONESIAN TEXT-TO- SPEECH SYSTEM
M. Teduh Uliniansyah, Gunarso, Elvira Nurfadhilah, Lyla Ruslana Aini, A. Juliati Junde, Fara Ayuningtyas and Agung Santosa.
9. A TEMPORAL COHERENCE LOSS FUNCTION FOR LEARNING UNSUPERVISED ACOUSTIC EMBEDDINGS
Gabriel Synnaeve and Emmanuel Dupoux.
10. TOWARDS ROBUST INDONESIAN SPEECH RECOGNITION WITH SPONTANEOUS SPEECH ADAPTED ACOUSTIC MODELS
Devin Hoesen, Cil Hardianto Satriawan, Dessi Puji Lestari and Masayu Leylia Khodra.
11. THE EFFECT OF TONE MODELING IN VIETNAMESE LVCSR SYSTEM
Quoc Bao Nguyen, Thang Vu and Chi Mai Luong.
12. SPOKEN LANGUAGE IDENTIFICATION USING PHONOTACTICS METHODS ON MINANGKABAU, SUNDANESE DAN JAVANESE
Nur Endah Safitri, Amalia Zahra and Mirna Adriani.

15:10-15:35

Coffee Break

15:35-17:15

Oral session: “SEMI-SUPERVISED TRAINING & CODE-SWITCHING”

[Chair: Alexey Karpov]

5 Talks - 100min (each 20min; approx. 15min presentation + 5min Q&A)

1. LITHUANIAN BROADCAST SPEECH TRANSCRIPTION USING SEMI-SUPERVISED ACOUSTIC MODEL TRAINING
Rasa Lileikytė, Arseniy Gorin, Lori Lamel, Jean-Luc Gauvain and Thiago Fraga-Silva.
2. SEMI-SUPERVISED TRAINING OF LANGUAGE MODEL ON SPANISH CONVERSATIONAL TELEPHONE SPEECH DATA
Ekaterina Egorova and Jordi Luque.
3. AUTOMATIC SPEECH RECOGNITION OF ENGLISH-ISIZULU CODE-SWITCHED SPEECH FROM SOUTH AFRICAN SOAP OPERAS
Ewald Van der Westhuizen and Thomas Niesler.
4. CODE-SWITCHED ENGLISH PRONUNCIATION MODELING FOR SWAHILI SPOKEN TERM DETECTION
Neil Kleynhans, William Hartman, Daniel Van Niekerk, Charl van Heerden, Rich Schwartz, Stavros Tsakalidis and Marelle Davel.
5. AUTOMATIC SPEECH RECOGNITION FOR AFRICAN LANGUAGES WITH VOWEL LENGTH CONTRAST
Elodie Gauthier, Laurent Besacier and Sylvie Voisin.

18:00

Bus depart (approx. 45-60min duration to Prambanan Temple area)

19:00-21:30

**Banquet at Rama Shinta Garden Resto at Prambanan Temple area
(incl. the famous Sendratari Ramayana; Java’s most spectacular dance-drama)**

Day4: May 12, 2016

-12:00 Cultural Events to Borobudur Temple

12:00-13:00 Lunch near Borobudur Temple area

13:00-15:00 **Panel Discussions: “The Future of Under-Resourced Languages”**

[Chair: Joseph Mariani/ Co-Chair: Sakriani Sakti]

(near Borobudur Temple area; approx. 2hours discussion)

- 1. Conference Committee (SLTU Board)**
Laurent Besacier (LIG, France)
- 2. Zero Resource Speech Challenge Organizer**
Emmanuel Dupoux (EHESS, France)
- 3. Babel Project**
Stavros Tsakalidis (BBN, USA)
- 4. UNESCO**
Ming Kuok Lim (UNESCO, Indonesia)
- 5. Academia**
Steven Bird (Uni-Melbourne, Australia)
- 6. Industry**
Martin Jansche (Google)
- 7. Open-source Software:**
Kaldi: Sanjeev Khudanpur (JHU, USA)
- 8. Country Representative)**

15:00-15:30 Closing Remarks

15:30 Bus depart (approx. 60-90min duration to Hotel Phoenix)