



IWSLT 2016
International Workshop on
Spoken Language Translation
Dec. 8th - 9th, 2016

13th International Workshop on Spoken Language Translation
Program

Thursday, December 8th, 2016

- 08:30 - 09:15 Workshop Registration
- 09:15 - 09:30 Welcome Remarks
Alex Waibel (General Chair)
Karlsruhe Institute of Technology, Germany; Carnegie Mellon University, USA
- 09:30 - 10:30 Report on the 13th IWSLT Evaluation Campaign, IWSLT 2016
- 10:30 - 11:00 Coffee Break
- 11:00 - 12:30 **Evaluation Campaign**
- 11:00 - 11:30 The 2016 KIT IWSLT Speech-to-Text Systems for English and German
Thai Son Nguyen, Markus Müller, Matthias Sperber, Thomas Zenkel, Kevin Kilgour, Sebastian Stüker and Alex Waibel
Karlsruhe Institute of Technology, Germany
- 11:30 - 12:00 The RWTH Aachen Machine Translation System for IWSLT 2016
Jan-Thorsten Peter, Andreas Guta, Nick Rossenbach, Miguel Graca and Hermann Ney
RWTH Aachen University, Germany
- 12:00 - 12:30 QCRI's Machine Translation Systems for IWSLT'16
Nadir Durrani, Fahim Dalvi, Hassan Sajjad and Stephan Vogel
Qatar Computing Research Institute, Qatar
- 12:30 - 14:00 Lunch



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14:00 - 16:00 Oral Session I

14:00 - 14:30 Microsoft Speech Language Translation (MSLT) Corpus: The IWSLT 2016 Release for English, French and German
Christian Federmann and William D. Lewis
Microsoft Research, USA

14:30 - 15:00 Audio Segmentation for Robust Real-Time Speech Recognition Based on Neural Networks
Micha Wetzel, Matthias Sperber and Alexander Waibel
Karlsruhe Institute of Technology, Germany

15:00 - 15:30 Multilingual Disfluency Removal using NMT
Eunah Cho, Jan Niehues, Thanh-Le Ha and Alex Waibel
Karlsruhe Institute of Technology, Germany

15:30 - 16:00 Towards Improving Low-Resource Speech Recognition Using Articulatory and Language Features
Markus Müller, Sebastian Stüker and Alex Waibel
Karlsruhe Institute of Technology, Germany

16:00 - 16:30 Coffee Break

16:30 - 18:00 Poster Session

The IOIT English ASR System for IWSLT 2016
Van Huy Nguyen, Trung-Nghia Phung, Tat Thang Vu and Chi Mai Luong
Institute of Information Technology, Vietnam

FBK's Neural Machine Translation Systems for IWSLT 2016
Rajen Chatterjee, Mohammad Amin Farajian, Costanza Conforti, Shahab Jalalvand, Vevake Balaraman, Mattia Di Gangi, Duygu Ataman, Marco Turchi, Matteo Negri and Marcello Federico
Fondazione Bruno Kessler, Italy

Adaptation and Combination of NMT Systems: The KIT Translation Systems for IWSLT 2016
Eunah Cho, Jan Niehues, Thanh-Le Ha, Matthias Sperber, Mohammed Mediani and Alex Waibel
Karlsruhe Institute of Technology, Germany



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The RWTH Aachen LVCSR System for IWSLT-2016 German Skype Conversation
Recognition Task
*Wilfried Michel, Zoltán Tüske, M. Ali Basha Shaik, Ralf Schlüter and
Hermann Ney*
RWTH Aachen University, Germany

QCRI's Machine Translation Systems for IWSLT'16
Nadir Durrani, Fahim Dalvi, Hassan Sajjad and Stephan Vogel
Qatar Computing Research Institute, Qatar
LIMS@IWSLT'16: MT Track
*Franck Burlot, Matthieu Labeau, Elena Knyazeva, Thomas Lavergne,
Alexandre Allauzen and François Yvon*
*Laboratoire d'Informatique pour la Mécanique et les Sciences de
l'Ingénieur, France*

RACAI Entry for the IWSLT 2016 Shared Task
*Sonia Pipa, Alin-Florentin Vasile, Ioana Ionascu, Stefan Daniel Dumitrescu
and Tiberiu Boroş*
Research Institute for Artificial Intelligence "Mihai Drăgănescu", Romania

The MITLL-AFRL IWSLT 2016 Systems
*Michaeel Kazi, Elizabeth Salesky, Brian Thompson, Jonathan Taylor,
Jeremy Gwinnup, Timothy Anderson, Grant Erdmann, Eric Hansen,
Brian Ore, Katherine Young and Michael Hutt*
*Massachusetts Institute of Technology Lincoln Laboratory - Air Force
Research Laboratory, USA*

The RWTH Aachen Machine Translation System for IWSLT 2016
*Jan-Thorsten Peter, Andreas Guta, Nick Rossenbach, Miguel Graca and
Hermann Ney*
RWTH Aachen University, Germany

The 2016 KIT IWSLT Speech-to-Text Systems for English and German
*Thai Son Nguyen, Markus Mueller, Matthias Sperber, Thomas Zenkel,
Kevin Kilgour, Sebastian Stueker and Alex Waibel*
Karlsruhe Institute of Technology, Germany

UFAL Submissions to the IWSLT 2016 MT Track
Ondřej Bojar, Roman Sudarikov, Tom Kocmi, Jindřich Helcl and Ondřej Cifka
Charles University, Czech Republic



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The UMD Machine Translation Systems at IWSLT 2016: English-to-French
Translation of Speech Transcripts
Xing Niu and Marine Carpuat
The University of Maryland, USA

The University of Edinburgh's Systems Submission to the MT Task at IWSLT
Marcin Junczys-Dowmunt and Alexandra Birch
The University of Edinburgh, UK

19:30

Social Event: Dinner



13th International Workshop on Spoken Language Translation
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Friday, December 9th, 2016

- 09:00 - 10:00 Invited Talk:
Achieving Human Parity in Conversational Speech Recognition
Geoffrey Zweig
Microsoft Research, USA
- 10:00 - 10:30 Open Discussion
The Future of the IWSLT Evaluation Campaign
- 10:30 - 11:00 **Coffee Break**
- 11:00 - 12:30 **Oral Session II**
- 11:00 - 11:30 Is Neural Machine Translation Ready for Deployment? A Case Study on
30 Translation Directions
Marcin Junczys-Dowmunt, Tomasz Dwojak and Hieu Hoang
Adam Mickiewicz University in Poznan, Poland; The University of
Edinburgh, UK
- 11:30 - 12:00 Toward Multilingual Neural Machine Translation with Universal Encoder
and Decoder
Thanh-Le Ha, Jan Niehues and Alex Waibel
Karlsruhe Institute of Technology, Germany
- 12:00 - 12:30 Factored Neural Machine Translation Architectures
Mercedes García Martínez, Loïc Barrault and Fethi Bougares
Laboratoire d'Informatique de l'Université du Maine, France
- 12:30 - 13:45 **Lunch**
- 13:45 - 15:15 **Oral Session III**
- 13:45 - 14:15 Investigating Cross-lingual Multi-level Adaptive Networks: The Importance
of the Correlation of Source and Target Languages
Alexandros Lazaridis, Ivan Himawan, Petr Motlicek, Iosif Mporas and
Philip N. Garner
Idiap, Switzerland; Queensland University of Technology, Australia; University of
Hertfordshire, UK
- 14:15 - 14:45 Integrating Encyclopedic Knowledge into Neural Language Models
Yang Zhang, Jan Niehues and Alex Waibel
Karlsruhe Institute of Technology, Germany



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- 14:45 - 15:15 Two-Step MT: Predicting Target Morphology
Franck Burlot, Knyazeva Elena, Lavergne Thomas and François Yvon
Laboratoire d'Informatique pour la Mécanique et les Sciences de
l'Ingénieur, France
- 15:15 - 15:30 **Coffee Break**
- 15:30 - 16:30 **Oral Session IV**
- A Verb Lexicon Model with Source-side Syntactic Context for String-to-Tree Machine Translation
Maria Nadejde, Alexandra Birch and Philipp Koehn
The University of Edinburgh, UK; Johns Hopkins University, USA
- Joint ASR and MT Features for Quality Estimation in Spoken Language Translation
Ngoc Tien Le, Benjamin Lecouteux and Laurent Besacier
Laboratoire d'Informatique de Grenoble, France
- 16:30 - 16:45 **Closing Remarks**