



EU-BRIDGE Partners

RWTH, KIT, HKUST, UEDIN, FBK, PJIIT, PEV

Contacts

RWTH Aachen University
Templergraben 55
D-52056 Aachen
www-i6.informatik.rwth-aachen.de
Prof. Hermann Ney

Project Coordinator

Karlsruhe Institute of Technology
Adenauerring 2
D-76131 Karlsruhe
http://isl.anthropomatik.kit.edu
Prof. Alex Waibel
alexander.waibel@kit.edu



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www.eu-bridge.eu

EU-BRIDGE - the Project

EU-BRIDGE is a European Integrated Project that aims at developing automatic transcription and translation technology that will permit the development of innovative multimedia captioning and translation services of audio-visual documents between European and non-European languages.

Technology Support for High-quality Automatic Speech Recognition Engines

Description and Exploitable Knowledge

Ongoing research provides the basis for state-of-the-art and high-quality automatic speech recognition systems. By applying newly developed technology, the recognition quality of existing engines is improved. Further, the engines become more robust and stable for a broad range of languages.

The challenge is to develop methods for the needs of different applications (e.g. recognition of lectures, TV shows etc.). Special focus is given to deep neural network techniques for acoustic and language modelling which improve speech robustness, domain adaptation and recognition accuracy in general.

The ultimate goal is to improve the quality of speech transcription in order to increase the recognition accuracy for transcription services like subtitling or interpreter support of the European Union. To reach this objective, on-going research for automatic speech recognition is very important.

Infrastructure

An essential part of the technology support is the actual transfer of new methods into the existing engines. However, before a newly developed feature is included into a running system, the impact will be verified in internal evaluations. Besides automatic evaluation metrics, tests based on the word error rate are employed. This verification pipeline ensures a continuous improvement of the used systems and a high-quality automatic speech recognition.

Terms of Availability

Can be inquired at RWTH Aachen University (Hermann Ney)

IPR Protection

RWTH Aachen University (Hermann Ney)