#### **EU-BRIDGE Partner**

KIT, Pervoice, FBK, UEDIN

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# **Polish Spoken Language Translation**

### **Description and Exploitable Knowledge**

Polish, one of the West-Slavic languages, due to its complex inflection and free word order forms a challenge for both automatic speech recognition (ASR) and spoken language translation (SLT). Seven cases, three genders, animate and inanimate nouns, adjectives agreed with nouns in terms of gender, case and number and a lot of words borrowed from other languages which are sometimes inflected as those of Polish origin, cause problems in establishing vocabularies of manageable size for translation to/from other languages and sparseness of data for statistical model training. Despite of ca. 60 millions of Polish speakers worldwide a number of public available resources for preparation of SMT system is rather limited, making the progress slower compared to other languages.

EU-BRIDGE project helped us develop our skills and collect more resources necessary to accomplish the task of Polish SMT, specifically for Polish/English language pair. Our SMT systems have since been successfully applied to various domains, including lecture and broadcast news, parliament speeches, tourist assistance, movie subtitles and medicine-related documents. We developed own BLSTM/DNN ASR decoder, Polish speech synthesis, mobile clients (Android) and specialized tools for the Polish language (text normalizer, corpus alignment, phonetic transcription, speech detection).



**Android Client** 

#### **Project Coordinator**

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Polish-Japanese Institute of Information Technology, EU-BRIDGE Consortium

## **EU-BRIDGE Partners (involved)**

KIT, Pervoice, FBK, UEDIN

## **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.

#### **Infrastructure**

Depending on application our systems work on dedicated server (e.g. in telecommunication) or on the cloud (for mobile applications). We are currently support MCloud service architecture and the system developed by the U-STAR consortium compatible with ITU F.745 and H.625 recommendations.

## **Application Sectors**

Telecommunication, tourist, medicine, entertainment

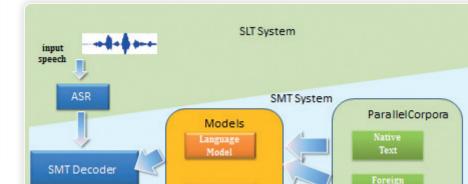
## **Technical requirements**

Fast internet Connection or dedicated SLU server.

## **Terms of Availability**

Can be inquired at the Polish-Japanese Institute of Information Technology

## **IPR Protection**



SLT-Architecture

TTS

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