

and machine translation capabilities that exceed the state-of-the-art in new and more challenging business cases. It will advance spoken language technologies to permit transmission of human information content from one language to another in situations that cannot be handled by automatic techniques to date.

Another key challenge is to reduce the cost of data collection and the depen-

EU-BRIDGE seeks to achieve rapid technology transition and market insertion by building distributed services instead of transferring software and by making deployment part of the project.

nologies. The team of partners proposes

to build one of the largest combined lan-

guage capabilities in speech recognition

EU-BRIDGE - Objectives

Effective, innovative and independent alternatives must be provided for Europe to serve its translation, communication, content processing, and publishing needs. The joint expertise of the consortium will drive the technological development forward, ensure best performance of core

capabilities, and ensure that insertion in actual business operations is achieved. At the core of EU-BRIDGE's objectives is the development of a speech translation service infrastructure upon which several use cases will be built.

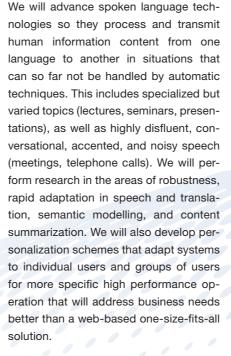
EU-BRIDGE - Research





In order to build the service infrastructure for speech translation, engines from the academic partners will be integrated into a service framework that offers an easyto-use infrastructure for the use case developers. Therefore, the academic partners perform research at their laboratories on the following:

Performance:



Language Portability for Europe:

EU-BRIDGE will provide speech and translation capability for languages of main interest to Europe. Building on key efforts and expertise, it will build one of the largest combined repertoires of languages available both in speech recognition and translation and will stretch to do so robustly for all communication channels. We will include core European languages and under-resourced European languages and will reach out to languages of the BRIC economies. Focused research efforts to improve portability itself play an important role. These efforts will lower the cost of moving capabilities effectively from one language to another.

Reduction of the Dependency on and Cost of Data:

Since data is the "crude oil" of information processing, solutions must make production cheaper and reduce our dependency on it. By making speech and machine translation components adaptive and language and style independent, and by streamlining the process, EU-BRIDGE will significantly reduce data needs. By involving the users themselves in correcting and building the systems

implicitly, i.e. by crowd sourcing, the cost of data acquisition will be reduced, thus, building and improving the systems.By taking better advantage of available but not well-prepared data, the cost of data preparation will be reduced and the effective usable data increased. This includes comparable data, monolingual data, spoken and textual data, noisy data, and automatic methods for judging the quality of data.

Rapid Technology Transition and Market Insertion:

The program will strive to transition research development to commercial deployment more rapidly. This will be done by building distributed services instead of transferring software and by making deployment part of the project. The systems will be applied to real-world data, and we will carry out pilot experiments and field studies around four business opportuni-



EU-BRIDGE - Evaluation and Dissemination

of our activities in this project and thoroughly evaluate the success. EU-BRIDGE will evaluate the improvements from the core research activities on in-house test sets using automatic measures. The test data for the in-house tests will be closely related to the use cases developed in this project and will be collected with the help of the partners heading the use cases. The engines developed for the integration into the speech translation service infrastructure will be evaluated on an international stage against worldwide participants in external evaluation campaigns.

The consortium will monitor the progress

Finally, all activities, results, and progress will be disseminated through various channels not only to the scientific community, but also to the general public, decision makers, and most importantly to the European industry that would benefit from the availability of the service infrastructure which is intended to live beyond the life-time of the project. The infrastructure is intended to be used in many more applications than the four use cases of the project, which will be the pioneers inspiring other users and prove the feasibility of the concept.

