A digital system for automatic and simultaneous translation, also suitable for mobile use, can be seen at the Karlsruhe Institute of Technology (KIT).

The Interactive Systems Lab (ISL), based in the KIT Institute for Anthropomatics and Robotics (IAR), is developed a translation system of this kind named Lecture Translator. It makes use of processes for translating spoken language. These processes combine automatic speech recognition with machine-based translation and various auxiliary functions; the latter structure the text, deal with problems such as punctuation and compounds, record the text and display it on a screen, KIT informs us.

Automatic translation of lectures
KIT has already installed Lecture Translator in lecture theatres to support foreign students in following lectures in German. The German spoken during teaching is translated simultaneously into English. "Lecture Translator works with a cloud-based service infrastructure," explains Alexander Waibel, Professor for Informatics at KIT and leader of the IAR. "A local client records the lecturer's speech and transfers it to the infrastructure. Next, a server manages the data flow." The result is published on a website at https://lecture-translator.kit.edu. In addition, the system archives the lectures, thus enabling later text queries. Other universities are likewise interested in the system. The speech recognition in the digital translator can also be used to produce real-time transcriptions of speeches, for example in the form of subtitles. Lecture Translator thus improves access to content, as in the case of those with hearing difficulties. The system is also of service in public transmissions.

Cooperations with industry
In industry, efficient communication brings advantages for many segments. At KIT, ISL cooperates with industry to open up applications with automatic and simultaneous translation. The research team in Karlsruhe accordingly joined forces with SAP to use Lecture Translator in Massive Open Online Courses (MOOCs) as part of SAP's free online training.
programme. A further project with SAP, concentrating particularly on automatic speech recognition, is in planning.

Visit Karlsruher Institut für Technologie [KIT] at Hannover Messe in Hall 2, Booth B16.

For more news visit our facebook page or twitter.