Spoken language translation (SLT) is the science of automatic translation of spoken language. It may be tempting to view spoken language as nothing more than language (as in text) with an added spoken verbalization preceding it. Translation of speech could then be achieved by simply applying automatic speech recognition (ASR or "speech-to-text") before applying traditional machine translation (MT).

Unfortunately, such an overly simplistic approach does not address the complexities of the problem. Not only do speech recognition errors compound with errors in machine translation, but spoken language also differs considerably in form, structure and style, so as to render the combination of two text-based components as ineffective. Moreover, automatic spoken language translation systems serve different practical goals than voice interfaces or text translators, so that integrated systems and their interfaces have to be designed carefully and appropriately (mobile, low-latency, audio-visual, online/offline, interactive, etc.) around their intended deployment.

Unlike written texts, human speech is not segmented into sentences, does not contain punctuation, is frequently ungrammatical, contains many disfluencies, or sentence fragments. Conversely, spoken language contains information about the speaker, gender, emotion, emphasis, social form and relationships and –in the case of dialog- there is discourse structure, turn-taking, back-channeling across languages to be considered.

SLT systems, therefore, need to consider a host of additional concerns related to integrated recognition and translation performance, use of social form and function, prosody, suitability and (depending on deployment) effectiveness of human interfaces, and task performance under various speed, latency, context and language resource constraints.

Due to continuing improvements in underlying spoken language ASR and MT components as well as in the integrated system designs, spoken language systems have become increasingly sophisticated and can handle increasingly complex sentences, more natural environments, discourse and conversational styles, leading to a variety of successful practical deployments.

In the light of 25 years of successful research and transition into practice, the MT Journal dedicates a special issue to the problem of Spoken Language Translation. We invite submissions of papers that address issues and problems pertaining to the development, design and deployment of spoken language translation systems. Papers on component technologies and methodology as well as on system designs and deployments of spoken language systems are both encouraged.
Submission guidelines:
  • Authors should follow the "Instructions for Authors" available on the MT Journal website: http://www.springer.com/computer/artificial/journal/10590
  • Submissions must be limited to 25 pages (including references)
  • Papers should be submitted online directly on the MT journal's submission website: http://www.editorialmanager.com/coat/default.asp, indicating this special issue in ‘article type’

Important dates:
  • Paper submission: July 15th 2016.
  • Notification to authors: August 3rd 2016.
  • Camera-ready*: November 19th 2016.

* tentative - depending on the number of review rounds required