In-booth CAI tool support in conference interpreter training & education

Discussion Panel

17 November 2021

Susana Rodríguez
Introduction
Panel agenda

- What are CAI tools
- What are in-booth CAI tools
- What are AI-powered in-booth CAI tools
- Aims of the Panel
- Topics to be discussed
- Introduction of panellists
- Panel Discussion
- Q&A
- Wrap-up
What are CAI tools

- **ICT in the field of interpreting**
  - Setting-oriented technologies
  - Process-oriented technologies

- **Computer-assisted Interpreting (CAI) tools**

What are *in-booth* CAI tools

- Use of CAI tools in the different phases of the SI assignment
  - Prior
  - During
  - After

- In-booth: use of CAI tools during the SI task
  - Manual search (*1st & 2nd gen*)
  - Automatic search & prompting (*3rd & 4th gen*)
What are AI-powered in-booth CAI tools

- **ASR-powered Cascaded (3\textsuperscript{rd} gen)**
- **STT-powered* End-to-end (4\textsuperscript{th} gen)**

Some AI-powered CAI: InterpretBank

(https://interpretbank.com/ASR#hardware)
Some **AI-powered** CAI: InterpretAssist

(kudoway.com/kudo-interpreter-assist-artificial-intelligence/)

Introducing: KUDO Interpreter Assist
Some AI-powered CAI: SmarTerp

Remote Simultaneous Interpreting powered by Artificial Intelligence

A hybrid interpretation system that brings machines and humans together for a smarter interpreting
Some AI-powered CAI: STT-powered CAI

Is "moby dick" a Whale or a Bird?
Named Entities and Terminology in Speech Translation
Marco Guido$^{1,2}$, Susana Rodríguez$^{2}$, Matteo Negri$^{1}$, Luisa Bentivogli$^{1}$, Marco Turchi$^{2}$
$^{1}$Fondazione Bruno Kessler, $^{2}$University of Trento, $^{3}$Independent Researcher
{guido,negr/bentivogli,turchi}@fbk.eu

1. Motivation & Contribution
Neutral translation models struggle with named entities (NEs) and specific terminology.
NEs/TERMs are critical for comprehension and are key elements in some applications (e.g., finance, interpreting).

2. NEUrOparti-ST: the benchmark
First benchmark to evaluate NEs and terminology in ST.
En -- > Eo, Fr, It.

3. NE/term Accuracy of SoTA systems
CASCADE ST
- ASR
- MT
- Cascade
- Direct

DIRECT ST
- ASR + MT + Cascade + Direct

Cascade has a robust MT that helps term translation:
- Direct better translates NEs.
- No error propagation.
- No translation of homographs of common words (e.g., Mr/Mrs, Parish).

Analysis of NE types
- Person names are hard to recognize from speech (low scores for ASR, ST).
- Location names are hard to translate (see MT), but easy to recognize from speech (see ASR).

Benchmark and code available at: https://ict.fbk.eu/neuroparti-st/

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Aims of the Panel

This panel focuses on in-booth CAI tool support from a training / education perspective and aims to foster dialogue on the needs and challenges in this new area of educational practice and research.
What is the current state of CAI tool use / training / research? What are panellists’ attitudes towards their rapid development? What role do they expect to play in the future?

What is CAI tool “training”? Is specific training on CAI tools necessary? Why?

What are the challenges to the development of CAI tool training?

What are future directions for research / remaining research gaps? (specific to pedagogy)
Panellists
Panel discussion