

## Summary of REVERB workshop panel discussion

Time: 5:30pm-6:10pm, May 10, 2014

Place: 4th floor of Palazzo degli Affari, Firenze Fiera, Florence, Italy

Question 1: How was the challenge framework? How can we do better for the next challenge?

- Sharing transcriptions/lattices generated from participants' ASR systems would be useful to compare and analyze the results in more detail.
  - Requiring additional data that may potentially allow us to analyze the detailed behavior of the systems may make the participation to the challenge, particularly from companies, a bit more difficult.
- We could make the challenge more realistic. For example, the noise level can be higher, the noise sources can be more diverse, and the speaker may move. Streams of speech can be employed, which also requires voice activity detection.
- With the documentation of the recording conditions, such as RIRs and noise, a wider range of analysis can be accomplished along with the challenge.
  - For the REVERB challenge database, such a document will be published on the webpage soon after the REVERB workshop.
- Handling short utterances (1 sec) can be a next challenge.
- A new data set of real recordings for a distant speech capturing scenario using the WSJ transcription is in preparation (by Dr. John McDonough).
- It might be interesting to start a common effort in the community for collecting a greater amount of real data.

Question 2: Usefulness of SimData and Realdata?

- RealData is essential to confirm the applicability of an algorithm under realistic conditions. Without it, we may develop algorithms that can work only for SimData.
- Nevertheless, SimData is necessary to analyze an algorithm under various recording conditions and to sharpen the algorithm. (In contrast, RealData may be too diverse to analyze the algorithm in many different aspects.)

Question 3: Objective measures used for SE appropriate?

- A standard SE toolbox that includes the implementation of a conventional SE algorithm, such as a beamformer, would be useful.
- A standard toolbox to calculate objective measures is important.
  - We could use the evaluation toolbox from the REVERB challenge.
- Good objective measures are important and should be further explored.