

# Workshop Structure for Hands-on Speaker Extraction in HRI - SPRING Project Edition

## 1. Introduction to HRI and Speech Processing (10 minutes)

- Brief overview of HRI and its relevance to robotics within the context of the SPRING project of HORIZON 2020.
- Introduction to speech processing in HRI and the importance of speaker extraction.
- Overview of the hands-on activity: recording speech samples and extracting voices on participants' laptops.

## 2. Basics of Speaker Extraction (10 minutes)

- Explanation of key concepts in speaker extraction.
- Overview of common techniques and algorithms used.
- Introduction to the process of recording speech samples on laptops.

## 3. Hands-on Session: Recording Speech Samples (20 minutes)

- Provide instructions for participants to record their own speech samples on their laptops.
- Allow time for participants to record their speech samples.

## 4. Hands-on Session: Extracting Voices (30 minutes)

- Provide participants with sample code or tools for voice extraction on their laptops.
- Guide participants through the process of extracting voices from their recorded speech samples using the provided model.

## 5. Evaluation and Discussion (10 minutes)

- Encourage participants to evaluate the effectiveness of their voice extraction.
- Facilitate a discussion on challenges encountered and potential contributions to the SPRING project's objectives.
- Discuss potential applications of voice extraction in HRI research.

## 6. Conclusion (10 minutes)

- Summarize key takeaways from the workshop, emphasizing their relevance to the SPRING project and its goals.
- Provide additional resources for further learning.