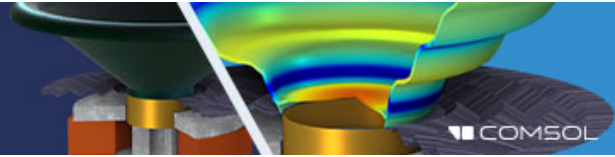


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Speaker tracking across a massive naturalistic audio corpus: Apollo-11

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Meeting abstract. No PDF available.

ABSTRACT

Apollo-11 was the first manned space mission to successfully bring astronauts to the moon. More than + 400 mission specialists/support team members were involved whose voice communications were captured using the SoundScriber multi-channel analog system. To ensure mission success, it was necessary for teams to engage, communicate, learn, address and solve problems in a timely manner. Hence, in order to identify each speaker's role during Apollo missions and analyze group communication, we need to automatically tag and track speakers individually since manual annotation is costly and time consuming on a massive audio corpus. In this study, we focus on a subset of 100 h derived from the 10 000 h of the Fearless Steps Apollo-11 audio data. We use the concept of "Where's Waldo" to identify all instances of our speakers-of-interest: (i) Three Astronauts; (ii) Flight Director; and (iii) Capsule Communicator. Analyzing the handful of speakers present in the small audio dataset of 100 h can be extended to the complete Apollo mission. This analysis provides an opportunity to recognize team communications, group dynamics, and human engagement/psychology. Identifying these personnel can help pay tribute to the hundreds of notable engineers and scientists who made this scientific accomplishment possible. Sponsored by NSF #2016725

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