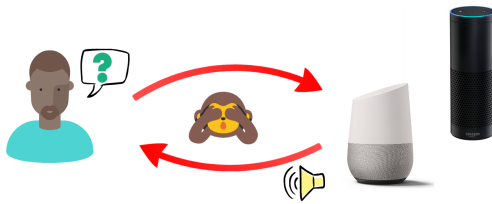


# How Do People Interact in Conversational Speech-Only Search Tasks: A Preliminary Analysis

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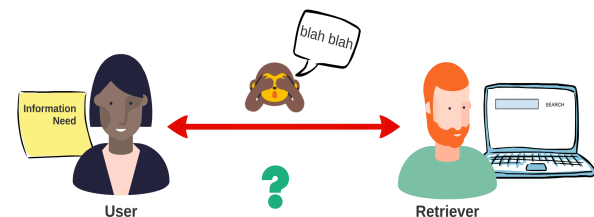


## Speech-only Search Interactions

- What conversational strategies are used to communicate the found information via a speech-only channel?
  - Are there **conversational search patterns**
- Which **differences in search and interaction behaviours** exist depending on the search task complexity?

## Methodology

- Observed how people communicate when they solve an information need and cannot see the search results
  - **Users** are given three search tasks based on different cognitive complexity (Remember, Understand, Analyse)
  - Search results are read out by **Retriever** who has access to a search engine



## Annotation and Analysis

- Observations were recorded, transcribed, and annotated
- Recordings were analyzed using Thematic analysis
  - Each turn received a data-derived code
  - Designed codes were aggregated, creating themes

Turn 1: USER (Information Request)	Effectiveness of new security measures at airports
Turn 2: RETRIEVER (Query Refinement Offer)	Australia or at the airport
Turn 3: USER (Intent Clarification)	Put uhm... put international airports

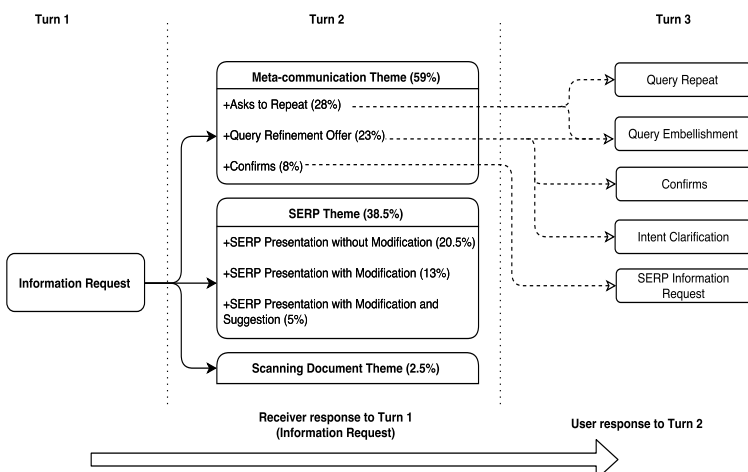
## Preliminary Results

### Conversational Patterns

- The speech-only search interactions are coded into conversational patterns and classified into three themes: *Meta-communication*, *SERP*, and *Scanning Document*
- Information Request
  - Users talk about their information need and do not formulate explicit queries
  - Users submitted very detailed and carefully crafted queries

### Interaction Behaviours

- No clear signs that differences exist in search and interaction behaviours depending on the search task complexity
  - Remember tasks received enough information to satisfy the information need in a much shorter time frame
  - Meta-communication theme usage grew as task complexity increased



### Ongoing Work

- Further coding and analysis of complete data set
  - Hypotheses generation from observations such as response generating techniques
  - Validate generated hypotheses with
    - Crowdsourcing
    - Wizard of Oz

Data Set

[bit.ly/SpokenConvSearchCHIIR](http://bit.ly/SpokenConvSearchCHIIR)

