

THE OHIO STATE UNIVERSITY



On-line Phase

1. Parameter Value Elicitation

- Questions are presented to the user and their answers are recorded.
- A knowledge-base maintains the information of all parameters and associated questions, which is prepared in the off-line phase.

2. Parameter Value Extraction

- Two underlying subtasks:
- 1. Understanding the semantics of the given parameter by reading its technical descriptions
- 2. Extracting the value from a natural language conversation.
- Recruit non-expert crowd workers.

3. Response Generation

- Convert the API response object, e.g., JSON or XML data, into natural language text.
- Two underlying subtasks
- 1. Understand the information.
- 2. Describe the information in a natural language
- Recruit non-expert crowd workers.

Combining Non-Expert and Expert Crowd Work to Convert Web APIs to Dialog Systems Ting-Hao K. Huang, Walter S. Lasecki, Alan L. Ritter, Jeffrey P. Bigham







Off-line Phase

"unnatural" fields that are unlikely