

NTCIR-16



Pilot Task: Session Search (SS)

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Motivation

- Multi-query sessions/tasks are common in search process nowadays.
 - Considering the contextual information within sessions has been proved efficient for user intent modeling in IR communities.
 - Existing tasks in NTCIR have not involved session-based retrieval yet.
- Existing relevant tasks
 - TREC Session Track 2011-2014: small-scale datasets, simulated search tasks, only evaluate the last query;
 - TREC Dynamic Domain (DD) Track 2015-2017: user simulators, ignore user reformulations.

==> NCTIR-16 Session Search Task



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Methodology

- To better assess the search effectiveness at both query-level and session-level, we aim to set up two subtasks as follows:

Fully Observed Session Search (FOSS):

- For a k -length session, we provide full session contexts in the first $(k - 1)$ queries.
- NDCG, AP, RBP

Partially Observed Session Search (POSS):

- In this subtask, we truncate all sessions before the last query. For a session with k queries ($k \geq 2$), we only reserve the session contexts in the first n queries, where $1 \leq n \leq k - 1$.
- RS-DCG, RS-RBP



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Methodology

Table1. Differences between our Session Search task and previous related tasks

| | <i>Ours (NTCIR SS task)</i> | <i>TREC Session Tracks</i> |
|--|--|---|
| Number of Sessions | <ul style="list-style-type: none"> Chinese: 147,155 (Training) + 1,124 (Validating) + 2,356 (Testing) | <ul style="list-style-type: none"> English: 76~1,257 |
| Session Datasets | <ul style="list-style-type: none"> TianGong-ST TianGong-SS-FSD An un-released field study dataset | <ul style="list-style-type: none"> Session Track 2011-2014 |
| Document Collection | <ul style="list-style-type: none"> A collection provided by TianGong-ST, with more than 297,597 web pages. A collection which contains top 50 candidate documents for all queries in the validating and testing set. | <ul style="list-style-type: none"> ClueWeb09/ClueWeb12 |
| Source/Generation of session data | <ul style="list-style-type: none"> Refined from a search log from Sogou.com Extracted from two large-scale field studies. | <ul style="list-style-type: none"> Generated by real search users based on manually designed topics. |
| Support from log analysis for annotation? | Yes | No |
| Support for session-level evaluation? | Yes | No |

Dataset & Resources

- **Training set:**

- TianGong-ST (<http://www.thuir.cn/tiangong-st/>), Chinese-centric, with 147,155 refined Web search sessions, 40,596 unique queries, 297,597 Web pages, and six kinds of weak relevance labels assessed by click models.
- Participants can adopt any training techniques, e.g., adversarial learning, multi-task learning.

- **Validating set:**

- TianGong-SS-FSD (<http://www.thuir.cn/tiangong-ss-fsd/>), A Chinese-centric dataset collected via a field study. It collected daily search logs as well as explicit feedback from 30 participants for one month.

- **Testing set:** not released yet.



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Schedule

- ▣ July 1, 2021: Session Search registration due
- ▣ July 15, 2021: Dataset Release
- ▣ Sep 1, 2021 - Nov 30, 2021: Formal Run
- ▣ Dec, 2021 - Jan, 2022: Relevance Assessment
- ▣ Feb 1, 2022: Evaluation Result Release
- ▣ Feb 1, 2022: Draft Task Overview Paper Release
- ▣ Mar 1, 2022: Draft Participant Paper Submission Due
- ▣ May 1, 2022: All Camera-ready Paper Submission due
- ▣ Jun 2022: NTCIR-16 Conference & EVIA 2022 in NII, Tokyo, Japan



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Thank you!

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