NTCIR-17 Transfer Task

Resource Transfer Based Dense Retrieval

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English Version with audio

日本語版（音声付き）
Overview

Source Resources / Tasks

- **MS MARCO (eMARCO)**
  - Web Passages in English

- **MS MARCO (jMARCO)**
  - Web Passages translated into Japanese

- Generated models (En)

Target Resources / Tasks

- **Vectorization**
- **Indexing**
- **Ranking**
- **Reranking**

- **Participants**
- **Transfer Learning**
- **Translation**
- **Language Modeling**

- **1st Stage Retrieval**
- **2nd Stage Retrieval (Reranking)**
  - Dev
    - NTCIR-1 Ad-Hoc Academic Papers in Japanese
  - Test
    - NTCIR-2 Ad-Hoc Academic Papers in Japanese

- BERT Model, BERT-Reranker, ColBERT, etc.

New!
Examples of resource transfer

- Task transfer
  - Fine-tuning from navigational queries to informational queries
  - Fine-tuning from a language model to a ranking model
- Domain transfer
  - Domain adaptation from Web documents to academic writing
- Language transfer
  - English models to Japanese models
- and so on…
Data to be available

- **Existing data**
  - MS MARCO (ver 1) English version (aka eMARCO)
  - NTCIR-1 Ad-hoc test collection (Ja)
  - NTCIR-2 Ad-hoc test collection (Ja)
  - BERT models (En/Ja)

- **Data to be constructed and provided**
  - MS MARCO (ver 1) Japanese translation version (aka jMARCO)
    - Document collection and dev topics (Initial translation has been completed)
    - JParaCrawl version 2 + DeepL API
  - ColBERT Model trained on jMARCO
  - BERT-Reranker trained on dev / jMARCO
Subtask 1: Dense First Stage Retrieval

- **Input/Output**
  - Input: Ad-Hoc task topic description
  - Output: Ranked list of top 1,000 document IDs

- **Dev/Test**
  - Dev: NTCIR-1 Ad-Hoc/CLIR (Ja) 83 topics
  - Test: NTCIR-2 Ad-Hoc/CLIR (Ja) 49 topics

- **Metrics**
  - nDCG
Subtask 2: Dense Reranking Subtask

● **Input/Ouput**
  ○ Input: Top 1,000 documents from the 1st stage retrieval (Doc IDs, vectors, etc.)
    • Provided by the organizer
  ○ Output: Reranked list of top 100 document IDs

● **Dev/Test**
  ○ Dev: NTCIR-1 Ad-Hoc/CLIR (Ja) 83 topics
  ○ Test: NTCIR-2 Ad-Hoc/CLIR (Ja) 49 topics

● **Metrics**
  ○ nDCG / MRR
Tentative Schedule

- September 28th, 2022: Kick-off event
- January 30th, 2023: Final task guideline release, all resources release
- February 1st, 2023: Formal Run: Dev/Test topics release
- May 1st, 2023: Formal Run: Task registration due
- June 1st, 2023: Formal Run: Run submission due
- August 1st, 2023: Formal Run: Evaluation results returned
- August 1st, 2023: Task overview paper release (Draft)
- September 1st, 2023: Participant paper submission due (Draft)
- November 1st, 2023: Camera-ready submission due
- December 2023: NTCIR-17 Conference
Task Design Consideration

1. No sparse runs (e.g., BM25 only) but a simple fine-tuned model is acceptable
2. Subtask 2 has a fixed 1K docs set (Use outputs from Subtask 1?)
3. Currently focusing on Japanese in the target task (Other languages?)
4. Currently no restrictions on data/models to generate runs
5. Currently no Dry Run period
6. Accepts 3-5 runs per team (More?)
7. We trust participants not looking at qrels of test sets (Important)
8. We might perform additional relevance assessments
9. We might introduce a leaderboard
10. We aim to build a resource guide / best practice information
Advisory Board

- Noriko Kando (NII, Japan)
- Doug Oard (University of Maryland, USA)
- to be added
How to follow / contact

- Website [https://hcir.slis.tsukuba.ac.jp/project/ntcir-transfer/](https://hcir.slis.tsukuba.ac.jp/project/ntcir-transfer/)
- Contact [ntcir-transfer-contact@googlegroups.com](mailto:ntcir-transfer-contact@googlegroups.com)
- Twitter [#ntcir_transfer](https://twitter.com/search?q=%23ntcir_transfer)
- Slack (Registered Participants only)