The 1st Workshop on Document-grounded Dialogue and Conversational Question Answering

Proceedings of the Workshop

August 5, 2021
Bangkok, Thailand (online)
Preface

DialDoc Workshop focuses on Document-grounded Dialogue and Conversational Question Answering where system responses or answers are based on the relevant content in the associated documents. Such dialogue and conversational question answering systems have the potential to access heterogeneous knowledge in document content dynamically via natural language interactions. In addition, there is a vast amount of written and visual document content created by individuals and organizations to present their knowledge to the world in broad applications. Thus, there is a substantial demand of building personal assistive conversational systems based on documents in many different domains. This area also attracts great attentions from researchers and practitioners in various fields.

There are significant individual research threads that show promises in dialogue and QA models over different kinds of knowledge in document content, including (1) unstructured content such as text passages; (2) semi-structured content such as tables or lists; (3) multimedia such as images and videos with associated textual descriptions; (4) or structured data specified by schema such as RDFa or Microdata in the webpages. The purpose of this workshop is to invite researchers to bring their individual perspectives on the document-grounded dialogue and conversational question answering and advance the related AI research in joint effort. We also organize a Shared Task on modeling goal-oriented information-seeking dialogues that are grounded in the associated documents.

This Shared Task focuses on building goal-oriented information-seeking conversation systems. The goal is to teach a dialogue system to identify the most relevant knowledge in the given document for generating agent responses in natural language. It includes two subtasks: the first subtask is to predict the grounding span for next agent response given the context; the second subtask is to generate agent response in natural language given the context. There are a total of 23 teams that participated Dev-Test phase. For final test phrase, 11 teams submitted to the leaderboard of Subtask 1, and 9 teams submitted to the leaderboard of Subtask 2. Many submissions outperform baseline significantly. For the first task, the best system achieved 67.1 Exact Match and 76.3 F1 score. For the second subtask, the best system achieved 41.1 SacreBLEU score and highest rank by human evaluation.

In this workshop, we have research track and technical system track for Shared Task. There are a total 22 submissions, including 14 submissions to research track and 8 submissions to technical system track, among which, there are 5 non-archival submissions. The workshop program features all 19 accepted papers with another 8 ACL finding papers from ACL main conference. The paper presentations are either as posters or talks in virtual format. We are also fortunate to have great invited talks by Jonathan Berant, Danqi Chen, Dilek Hakkani-Tur, Verena Rieser, Jason Weston, William Wang Yang and Scott (Wen-tau) Yih.

Finally, we would like to thank our program committee members, invited speakers, ACL workshop chairs. We are also thankful to IBM Research for sponsoring the Shared Task competition.
Organizing Committee

Song Feng, IBM Research
Siva Reddy, McGill University and MILA
Malihe Alikhani, University of Pittsburgh
He He, New York University
Yangfeng Ji, University of Virginia
Mohit Iyyer, University of Massachusetts Amherst
Zhou Yu, Columbia University

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Jonathan Herzig, Tel-Aviv University
Matthew Stone, Rutgers University
Mert Inan, University of Pittsburgh
Michael Johnston, Interactions
Minjoon Seo, KAIST
Mo Yu, IBM Research AI
Peng Qi, Stanford University
Ravneet Singh, University of Pittsburgh
Ryuichi Takanobu, Tsinghua University
Seokhwan Kim, Amazon Alexa AI
Shehzaad Dhuliawala, Microsoft Research Montreal
Srinivas Bangalore, Interactions
Vaibhav Adlakha, McGill and Mila
Xiaoxiao Guo, IBM Research AI

**Invited Speakers**

Jonathan Berant, Tel-Aviv University
Danqi Chen, Princeton University
Dilek Hakkani-Tur, Amazon Alexa AI
Verena Rieser, Heriot-Watt University
Jason Weston, Facebook AI Research
William Wang Yang, University of California, Santa Barbara
Scott (We- tau) Yih, Facebook AI Research
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Di Jin, Seokhwan Kim and Dilek Hakkani-Tür
Conference Program

Thursday, August 5, 2021

8:00–8:05  Openning Remark

8:05–8:40  Invited talk I: Jonathan Berant

8:40–9:15  Invited talk II: Verena Rieser

9:15–10:05  Paper lightning talk I

10:05–10:30  Coffee break

10:30–11:05  Invited talk III: Jason Weston

11:05–11:30  Shared task overview

Song Feng

11:30–12:30  Poster session I

Liu Yang, Fanqi Meng, Xiao Liu, Ming-Kuang Daniel Wu, Vicent Ying and James Xu

11:30–12:30  A Template-guided Hybrid Pointer Network for Knowledge-based Task-oriented Dialogue Systems
Dingmin Wang, ziyao chen, Wanwei He, Li Zhong, Yunzhe Tao and Min Yang

11:30–12:30  Automatic Learning Assistant in Telugu
Meghana Bommadi, Shreya Terupally and Radhika Mamidi
Thursday, August 5, 2021 (continued)

11:30–12:30  *Combining Open Domain Question Answering with a Task-Oriented Dialog System*
Jan Nehring, Nils Feldhus, Harleen Kaur and Akhyar Ahmed

11:30–12:30  *CAiRE in DialDoc21: Data Augmentation for Information Seeking Dialogue System*
Yan Xu, Etsuko Ishii, Genta Indra Winata, Zhaojiang Lin, Andrea Madotto, Zihan Liu, Peng Xu and Pascale Fung

11:30–12:30  *Technical Report on Shared Task in DialDoc21*
Jiapeng Li, Mingda Li, Longxuan Ma, Wei-Nan Zhang and Ting Liu

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Nico Daheim, David Thulke, Christian Dugast and Hermann Ney

11:30–12:30  *Ensemble ALBERT and RoBERTa for Span Prediction in Question Answering*
Sony Bachina, Spandana Balumuri and Sowmya Kamath S

11:30–12:30  *Q²: Evaluating Factual Consistency in Knowledge-Grounded Dialogues via Question Generation and Question Answering*
Or Honovich, Leshem Choshen, Roee Aharoni, Ella Neeman, Idan Szpektor and Omri Abend

12:30–13:30  Lunch break

13:30–14:05  Invited talk IV: Danqi Chen

14:05–14:55  Paper lightning talk II

14:55–15:30  Invited talk V: Dilek Hakkani-Tur
Thursday, August 5, 2021 (continued)

15:30–16:30 **Poster session II**


Anant Khandelwal

15:30–16:30 *Summary-Oriented Question Generation for Informational Queries*

Xusen Yin, Li Zhou, Kevin Small and Jonathan May

15:30–16:30 *Document-Grounded Goal-Oriented Dialogue Systems on Pre-Trained Language Model with Diverse Input Representation*

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Hyundai Cho, Genevieve Bartlett and Marjorie Freedman

15:30–16:30 *Can I Be of Further Assistance? Using Unstructured Knowledge Access to Improve Task-oriented Conversational Modeling*

Di Jin, Seokhwan Kim and Dilek Hakkani-Tür

15:30–16:30 *Open-Retrieval Conversational Machine Reading*

Yifan Gao, Jingjing Li, Michael Lyu and Irwin King

15:30–16:30 *Empathic Conversations Grounded in News Stories: Dataset and Modeling of Empathy and Distress*

Damilola Omitaomu, Shabnam Tafreshi, Sven Buechel, Chris Callison-Burch, Lyle Ungar, Anneke Buffone and João Sedoc

15:30–16:30 *A Multi-Passage Knowledge Selector for Information-Seeking Dialogues*

Zeqiu Wu, Bo-Ru Lu, Hannaneh Hajishirzi and Mari Ostendorf
Thursday, August 5, 2021 (continued)

16:30–17:05  Invited talk VI: William Wang Yang

17:05–17:40  Invited talk VII: Scott (Wen-tau) Yih