DONGDING LIN

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EDUCATION

The Hong Kong Polytechnic University   *Sep. 2022 - Present*
PhD candidate in Department of Computing
Sun Yat-sen University   *Sep. 2017 - Jul. 2020*
M.Eng. in Computer Technology   **GPA: 3.9/4.0**
Sun Yat-sen University   *Sep. 2013 - Jul. 2017*
B.Eng. in Software Engineering   **GPA: 3.8/4.0 Rank:37/433**

PUBLICATIONS

Dongding Lin, Jian Wang, Chak Tou Leong, Wenjie Li. SCREEN: A Benchmark for Situated Conversational Recommendation. (ACM MM 2024).

Jian Wang, **Dongding Lin**, Wenjie Li. Target-constrained Bidirectional Planning for Generation of Target-oriented Proactive Dialogue. (TOIS 2024).

Jian Wang, Chak Tou Leong, Jiashuo Wang, **Dongding Lin**, Wenjie Li, Xiao-Yong Wei. Target-constrained Bidirectional Planning for Generation of Target-oriented Proactive Dialogue. (TOIS 2024).

Jian Wang, Yi Cheng, **Dongding Lin**, Chak Tou Leong, Wenjie Li. Target-oriented proactive dialogue systems with personalization: Problem formulation and dataset curation. (TOIS 2024).

Dongding Lin*, Jian Wang*, Wenjie Li. COLA: Improving Conversational Recommender Systems by Collaborative Augmentation. (*: Equal Contribution) (AAAI 2023).

Jian Wang*, **Dongding Lin***, Wenjie Li. Dialogue Planning via Brownian Bridge Stochastic Process for Goal-directed Proactive Dialogue. (*: Equal Contribution) (ACL 2023 Findings).

Jian Wang, **Dongding Lin**, Wenjie Li. A target-driven planning approach for goal-directed dialog systems. (TNNLS 2023). **Dongding Lin**, Jian Wang, Wenjie Li. Target-guided Knowledge-aware Recommendation Dialogue System: An Empirical Investigation. (KaRS@RecSys 2021).

Fenfang Xie, **Dongding Lin**, et.al. Personalized Service Recommendation With Mashup Group Preference in Heterogeneous Information Network. (IEEE Access 2019).

Fenfang Xie, **Dongding Lin**, et.al. Poster: Group Preference based API recommendation via heterogeneous information network. (ICSE 2018).

RESEARCH EXPERIENCES

NLP Group, PolyU   *Dec. 2022 - Present*
Situated Conversational Recommendation   *Supervisor: Prof. Wenjie, Li*

· Investigating techniques related to large-scale pre-trained language models and multi-modal dialogue system with the goal of increasing user engagement in our dialogue system. By leveraging multiple types of information, we aim to create a more immersive experience for the user.

NLP Group, PolyU   *July. 2021 - Dec. 2022*
Conversational Recommender System   *Supervisor: Prof. Wenjie, Li*

· Investigated the problem of target-guided knowledge-aware recommendation dialogue and design a dialogue generation system to make high-quality recommendations through interactive conversations proactively and naturally. This work has been accepted by the 3rd Workshop of Knowledge-aware and Conversational Recommender Systems **(KaRS 2021)** and the 37th AAAI conference on Artificial Intelligence **(AAAI 2023)**.

Collective Intelligence Systems Lab, SYSU *Feb. 2018 - Jul. 2020*
Machine Reading Comprehension *Supervisor: Prof. Rong Pan*

· Proposed a Hierarchical global-aware Information Transmission mechanism, which makes use of the interaction between local-aware information and global-aware information to improve the effectiveness of the model.
· Employed a Memory Flow mechanism. The memory information is updated by reading and writing operations on the memory module so that the model can not only store the information of historical questions and answers but also modify the stored information according to the current question and answer.
· The experimental results on CoQA datasets showed that our model obtained competitive results compared to the existing methods. Our ablation analysis results demonstrated the effectiveness of each step. This work is also the content of my postgraduate thesis.

NLP Group at SIAT, Chinese Academy of Sciences *Apr. 2019 - Oct. 2019*
Conversational Machine Reading Comprehension *Supervisor: Prof. Min Yang*

· Proposed a Hierarchical Conversation Flow Transition and Reasoning (HCFTR) model for conversational machine reading comprehension. One multi-flow transition mechanism is designed to integrate the global-aware information flow transition and make dynamic reasoning. One multi-level flow-context attention mechanism is developed to fuse multiple levels of hierarchical fine-grained representations and perform advanced reasoning.
· Experimental results on two benchmark datasets show that our model received competitive performance.

Mobile Internet and Financial Big Data Lab, SYSU *Jul. 2016 - Jul. 2017*
Service-Oriented Computing *Supervisor: Prof. ZiBin Zheng*

· Designed a Group Preference based API Recommendation System. The Ranking Recommendation System used the Bayesian Personalized Ranking Model, recommended appropriate APIs for Mashup (a new type of service in internet by integrating multiple sources or functions on the network). A series of experiments conducted on a real-world dataset demonstrate our proposed approach outperforms other baseline approaches.
· This work was also my undergraduate thesis's topic, given the award of the SYSU **Excellent Graduation Thesis** and accepted by International Conference on Software Engineering **(ICSE)-2018** and **IEEE Access-2019**.

HONORS/AWARDS

Ranked *4/750* in 2021 Language and Intelligence Challenge (Baidu).	*June 2021*
The Third Prize Postgraduate Scholarship of Sun Yat-sen University.	*2018-2019*
Ranked *4/119* in Materials Quality Prediction Kaggle Competition	*April-July 2018*
The Second Prize Postgraduate Scholarship of Sun Yat-sen University.	*2017-2018*
Outstanding Graduates Awards of Sun Yat-sen University (**Top 3%** awarded)	*June 2017*
Excellent Graduation Thesis of Sun Yat-sen University (**Top 3%** awarded)	*June 2017*
The **First** Prize Scholarship of Sun Yat-sen University (**Top 5%** awarded)	*2016-2017*
The **First** Prize Scholarship of Sun Yat-sen University (**Top 5%** awarded)	*2015-2016*
The Third Prize Scholarship of Sun Yat-sen University	*2014-2015*

TECHNICAL STRENGTHS

Interest	NLP, Dialogue System, CRS, Pretraining, Prompting, etc
Programming Languages	Python, C/C++, Java, Latex, JavaScript, MySQL, MATLAB
DL Framework	Pytorch, Tensorflow
English	CET4, CET6, IELTS(6.5)