

Shitong Dai

Tel: (+86) 151-0563-0588 | Email: dst111dst@ruc.edu.cn | GitHub: <https://github.com/dst111dst>
Addr. 59 Zhongguancun Street, Haidian District, Beijing, China

ACADEMIC INTEREST

Information Retrieval, Deep Learning, Data Mining, Nature Language Processing

EDUCATION

Gaoling School of Artificial Intelligence, Renmin University of China (RUC) **Beijing, China**
B.Eng. in Artificial Intelligence *Sept. 2020-Jun. 2024(Expected)*
GPA: 3.76/4.0; Ranking: 1/25
GAOLI Fintech Double degree program, RUC *Sept. 2020-Jun. 2024(Expected)*
Minor in Finance

PUBLICATION

Shitong Dai, Jiongnan Liu, Zhicheng Dou, Haonan Wang, Lin Liu, Bo Long, *Contrastive Learning for User Sequence Representation in Personalized Product Search*, SIGKDD2023(Submitted)

RESEARCH EXPERIENCE

Renmin University of China (RUC) **Beijing, China**
Research Assistant @ NLP/IR Lab, Advisor: Prof. Zhicheng Dou

Project: Personalized Product Search with Optimized Sequence Representation *April 2022-Present*

- Proposed a novel method called CoPPS that adopts contrastive learning framework to boost user representations for personalized product search.
- Designed three different data augmentation approaches, including sequence-based, rule-based and graph-based strategies to construct different views of user sequences.
- Conducted extensive experiments on four Amazon datasets, and proved the effectiveness of our model, which bring at least 5% performance improvement.
- Mainly be responsible for the model design and all code implementation.
- Summarized our research results into a paper and submitted to SIGKDD2023.

Project: Cross-modal Retrieval Based on Pre-training Models *Oct. 2021-Mar. 2022*

- Used the existing pre-training models such as BERT to verify the effect on different test data sets.
- Fine-tuned the model and tested its effect on the downstream task of commodity retrieval.

SELECTED COURSEWORK AND CONTESTS

Project: The Optimization of Legal Cases Search

The 2022 First RUC Legal Data Analysis Challenge *Aug. 2022-Dec.2022*

- Designed pipeline-based retrieval model to optimize the retrieval function of similar cases based on the data set of legal cases.
- Won the first prize of the Challenge.

Project: Recommendation of The Elderly Home Service Based on Personalized Retrieval

China College Students' 'Internet+' Innovation and Entrepreneurship Competition *Mar. 2021-Sept. 2021*

- Utilized the latest recommendation algorithm of Jingdong to model user search behavior and update it in real time.
- Awarded as the Top Ten winning works of the 2021 'Jingdong Cup' of RUC.

Project: The Implementation Small Search Engine*Jul. 2021*

- Coursework for *Artificial Intelligence Integrated Design*, Score:91/100
- Studied the advanced methods of web crawler and the classical algorithms of information retrieval (such as TF-IDF, PAGE-RANK, etc.)
- Built some personal blog web platforms with the basic JS and CSS language.

SKILLS

Programming Language: Python, C/C++, Java, etc.**Front-end Development:** HTML, CSS, JS, Script, Go, etc.**AWARDS AND OTHERS**

- First prize, the 2022 First RUC Legal Data Analysis Challenge *2022*
- Second prize, Excellent Scholarship of RUC *2022*
- 2022 RUC - Huawei "Smart Base" student scholarship *2022*
- State-level project, 2022 RUC College Student Innovation Experiment Plan *2022*
- Honorable Mention, Mathematical Contest in Modeling *2022*
- Top 10%, 2021CCF Big Data and Computing Intelligence Competition *2021*
- Top 10 in the country, 2021 INNOTHON Campus Innovation Challenge Rematch *2021*
- Outstanding Student Backbone Scholarship of RUC *2021*
- Third prize, Excellent Scholarship of RUC *2021*
- 2020 Outstanding League Backbone of Renmin University of China *2021*