Jihyuk Kim

jihyukkim@yonsei.ac.kr

RESEARCH INTERESTS

Natural Language Processing, Computational Linguistics
- Information Retrieval, Document/Passage Retrieval, Dense Retrieval
- Retrieval-Augmented Approaches
- Structures in Texts, Metadata for Text Understanding

EDUCATION

Yonsei University, Seoul, Korea   Mar 2019 – Present

Ph.D. Student in Computer Science and Engineering

Supervisor: Prof. Seung-won Hwang

Yonsei University, Seoul, Korea   Mar 2012 – Feb 2019

B.S. in Computer Science and Engineering

PUBLICATIONS

[1] **Relevance-assisted Generation for Robust Zero-shot Retrieval**
Jihyuk Kim, Minsoo Kim, Joonsuk Park, and Seung-won Hwang.
EMNLP (Industry Track) - *Empirical Methods in Natural Language Processing*, 2023

[2] **Pseudo-Relevance for Enhancing Document Representation**
Jihyuk Kim, Seung-won Hwang, Seoho Song, Hyeseon Ko and Young-In Song.
EMNLP - *Empirical Methods in Natural Language Processing*, 2022

[3] **Collective Self-Labeling for Passage Retrieval**
Jihyuk Kim, Minsoo Kim, Seung-won Hwang.
NAACL (Short) - *North American Chapter of the Association for Computational Linguistics*, 2022

[4] **Structure-Augmented Keyphrase Generation**
Jihyuk Kim, Myeongho Jeong, Seungtaek Choi, Seung-won Hwang.
EMNLP - *Conference on Empirical Methods in Natural Language Processing*, 2021

[5] **Web Document Encoding for Structure-Aware Keyphrase Extraction**
Jihyuk Kim, Young-In Song, Seung-won Hwang
SIGIR (Short) - *International ACM SIGIR Conference on Research and Development in Information Retrieval*, 2021

[6] **Retrieval-Augmented Controllable Review Generation**
Jihyuk Kim, Seungtaek Choi, Reinald Kim Amplayo, Seung-won Hwang
COLING - *International Conference on Computational Linguistics*, 2020

[7] **Categorical Metadata Representation for Customized Text Classification**
Jihyuk Kim[*], Reinald Kim Amplayo[*], Kyungjae Lee, Sua Sung, Minji Seo, Seung-won Hwang
([*] equal contribution)
TACL - *Transactions of the Association for Computational Linguistics*, 2019

[8] **Cold-Start Aware User and Product Attention for Sentiment Classification**
Reinald Kim Amplayo, **Jihyuk Kim**, Sua Sung, Seung-won Hwang
ACL - *Annual Meeting of the Association for Computational Linguistics*, 2018

RESEARCH EXPERIENCE

Research Intern at NAVER Search (Supervisor: Dr. Young-In Song)   Jul 2020- Aug 2020
- Project: Web Document Encoding for Structure-Aware Keyphrase Extraction (*published at SIGIR 2021*)

Applied Scientist Intern at Amazon, Alexa AI (Manager: Dr. Sungjin Lee)   Jun 2022- Sep 2022
- Project: Leveraging complementary strength between parametric and non-parametric approaches

Research Intern at NLP group, Microsoft Research Asia (Mentor: Dr. Tao Ge) Nov 2022- Apr 2023
- Project: Self-Improving Query-Document Matching for Zero-shot Retrieval

Applied Scientist Intern at Amazon, Alexa AI (Manager: Dr. Sungjin Lee)   Jun 2023- Sep 2023
- Project: Improving comprehensiveness and verifiability of long-form answers (work in progress)

AWARDS & SCHOLARSHIPS	▪ **Outstanding Reviewer** at ACL 2021 ▪ **Computer Science Department Scholarship** at Yonsei University 2018-2021 ▪ **Korean Government Scholarship Program (BK21+)** at 2019
PROFESSIONAL SERVICES	ARR 2023 July Reviewer, ARR 2022 Jan/March/June/July Reviewer, ACL 2021 Reviewer, EMNLP 2021 Reviewer, SIGIR 2021 Student Volunteer
SKILLS	Programming Languages: Python, C, C++ Libraries: PyTorch
REFERENCES	Seung-won Hwang, Ph. D. Professor, Department of Computer Science and Engineering, Seoul National University