Junmo **Kang**

Researcher at KAIST IR&NLP Lab

junmo.kang@kaist.ac.kr | jm-kang.github.io

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST) Daejeon, Korea
M.S. in School of Computing Mar. 2019 - Feb. 2021

- Advisor: Sung-Hyon Myaeng
- Thesis committee: Sung-Hyong Myaeng, Hojin Choi, Alice Oh
- GPA: 4.03 / 4.30

Chungnam National University Daejeon, Korea
B.S. in Computer Science & Engineering Mar. 2012 - Feb. 2019

- Summa Cum Laude
- GPA: 4.30 / 4.50 (Rank: 1/195 in CSE)

RESEARCH INTERESTS

Natural Language Processing, Machine Learning
Question Answering, Representation Learning, Generative Model, Information Retrieval

PUBLICATIONS

[1] **UHD-BERT: Bucketed Ultra-High Dimensional Sparse Representations for Full Ranking** arXiv, 2021
Kyoung-Rok Jang, **Junmo Kang**, Giwon Hong, Sung-Hyon Myaeng, Joohee Park, Taewon Yoon, Heecheol Seo [pdf]

[2] **Can You Distinguish Truthful from Fake Reviews? User Analysis and Assistance Tool for Fake Review Detection** HCI+NLP@EACL, 2021
Jeonghwan Kim*, **Junmo Kang***, Suwon Shin*, Sung-Hyon Myaeng [pdf]

[3] **A Sequence-Oblivious Generation Method for Context-Aware Hashtag Recommendation** arXiv, 2020
Junmo Kang, Jeonghwan Kim, Suwon Shin, Sung-Hyon Myaeng [pdf]

[4] **Handling Anomalies of Synthetic Questions in Unsupervised Question Answering** COLING, 2020
Giwon Hong*, **Junmo Kang***, Doyeon Lim*, Sung-Hyon Myaeng [pdf]

[5] **Regularization of Distinct Strategies for Unsupervised Question Generation** Findings of EMNLP, 2020
Junmo Kang*, Giwon Hong*, Haritz Puerto San Roman*, Sung-Hyon Myaeng [pdf]

[6] **Let Me Know What to Ask: Interrogative-Word-Aware Question Generation** MRQA@EMNLP, 2019
Junmo Kang*, Haritz Puerto San Roman*, Sung-Hyon Myaeng [pdf]

EXPERIENCES

KAIST IR&NLP Lab Mar. 2021 - Present
Researcher

- Working on QA and IR.

Poten Brothers Mar. 2017 - Feb. 2018

Co-founder

- Developed a service that connects potential customers with start-ups to provide feedback on their early-stage products.

Republic of Korea Army Apr. 2013 - Jan. 2015

Honorably discharged as Sergeant

- Compulsory military service.

PROJECTS

Neural Information Retrieval Mar. 2021 - Present

Supporter: Samsung SDS (KAIST - Samsung SDS joint research)

- Developing an efficient open-domain question answering system based on latent sparse representations.
- Developing an ensemble model that exploits the distinct effects of dense and sparse models.

Deep Matching for Efficient Search Nov. 2019 - Oct. 2020

Supporter: NAVER

- Proposed a novel sparse representation model for passage retrieval that can take advantage of an efficient inverted index and symbolic IR techniques.

Exobrain Mar. 2019 - Present

Supporter: Korean Government

- Developed an ensemble model that combines graph-based QA model and reading comprehension QA model (1st rank in the leaderboard of TriviaQA Wikipedia at the date of 08/10/19).
- Working on improving multi-hop QA using graph neural networks (HotpotQA).

Machine Learning for Context Association and Smart Interaction Suggestion Mar. 2019 - Mar. 2021

Supporter: Korean Government

- Worked on Instagram tag recommendation considering multi-modal contexts (location, time, text).
- Built a baseline model that maps input contexts and tags into the joint embedding space, and proposed a novel generation model that takes the inter-dependency of tags into account while alleviating the order sensitivity.

HONORS & AWARDS

Graduated with Highest Honor in CSE, Chungnam National University	2019
Grand Prize, Business ICT Competition	2018
Excellence Award, Startup Competition	2018
Finalist (Top 20), NAVER AI Hackathon	2018
Grand Prize, Daejeon Startup School	2017
Excellence Award, CNU Creative Works Competition	2017
Best Excellence Award, C.N.U.Vill	2017
Best Excellence Award, Startup Picnic	2016
Finalist (Top 2), Microsoft Imagine Cup Korea	2016