BOSUNG KIM

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EDUCATION

University of California, San Diego
PhD in Computer Science and Engineering
Present
San Diego, CA, USA
- Advisor: Prithviraj (Raj) Ammanabrolu

Sogang University
M.S. in Computer Science and Engineering
Feb. 2020
Seoul, South Korea
- Natural Language Processing Lab, advised by Jungyun Seo

Sogang University
B.S. in Computer Science and Engineering
Feb. 2016
Seoul, South Korea
- Magna Cum Laude

PUBLICATIONS
-CONFERENCE

SYMPTOMIFY: Transforming Symptom Annotations with Language Model Knowledge Harvesting.
Bosung Kim, Ndapa Nakashole.
Findings of the Association for Computational Linguistics: EMNLP, 2023. [paper]

Zero-shot Triplet Extraction by Template Infilling.
Bosung Kim, Hayate Iso, Nikita Bhutani, Estevam Hruschka, Ndapa Nakashole, Tom Mitchell.
Proceedings of the 13th International Joint Conference on Natural Language Processing and the 3rd Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics (IJCNLP-AACL), 2023.
[paper]

Chride at SemEval-2023 Task 10: Fine-tuned DebertaV3 on Detection of Online Sexism with Hierarchical Loss.
Letian Peng, Bosung Kim.
Proceedings of the the 17th International Workshop on Semantic Evaluation (SemEval), 2023. [paper]

Data Augmentation for Rare Symptoms in Vaccine Side-Effect Detection.
Bosung Kim, Ndapa Nakashole.
Proceedings of the 21st Workshop on Biomedical Language Processing (BioNLP), 2022. [paper]

Query Reformulation for Descriptive Queries of Jargon Words Using a Knowledge Graph based on a Dictionary.
Bosung Kim, Hyewon Choi, Haeun Yu, Youngjoong Ko.
Proceedings of the 30th ACM International Conference on Information & Knowledge Management (CIKM), 2021. [paper]

Commonsense Knowledge Augmentation for Low-Resource Languages via Adversarial Learning.
Bosung Kim*, Juae Kim*, Youngjoong Ko, Jungyun Seo.
Proceedings of the AAAI Conference on Artificial Intelligence (AAAI), 2021. (*Equal contribution) [paper]

Multi-task learning for Knowledge Graph Completion using Pre-trained Language Models.
Bosung Kim, Taesuk Hong, Youngjoong Ko, Jungyun Seo.
Proceedings of the 28th International Conference on Computational Linguistics (COLING), 2020. [paper]

PUBLICATIONS -JOURNAL	**Novel Regularization Method for the Class Imbalance Problem**
	Bosung Kim, Youngjoong Ko, Jungyun Seo.
	Expert Systems With Applications, Vol 188, February 2022.

WORK EXPERIENCE	**Applied Scientist Intern, AWS AI Lab**	June. 2024 - Sep. 2024
	Amazon Q	New York, NY, USA
	• Project: Multi-domain Query-driven Knowledge Graph Construction.	
	• Mentors: Minh Nguyen and Bonan Min	
	Research Intern, Ancestry.com	June. 2023 - Sep. 2023
	CV/NLP team	Lehi, Utah, USA
	• Project: Large-scale Relation Extraction using LLMs.	
	• Mentors: Maria Fabiano and Jack Rease	
	Research Intern, Megagon Labs	June. 2022 - Sep. 2022
	Natural Language Processing team	Mountain View, CA, USA
	• Project: Zero-shot Relation Extraction using LLMs.	
	• Mentors: Hayate Iso, Nikita Bhutani, Estevam Hruschka, and Tom Mitchell	
	Researcher, Sungkyunkwan University	Mar. 2020 - Aug. 2021
	Natural Language Processing Lab	Suwon, South Korea
	• Research area: knowledge graph representation, transfer learning for low-resource languages.	
	• Advisor: Youngjoong Ko	
	Software Engineer, Coupang	Dec. 2015 - Dec. 2017
	Query Understanding team	Seoul, South Korea / Mountain View, CA, USA
	• Main task: Query processing and query recommendation.	
	Engineering Intern, Samsung Electronics	June. 2014 - Aug. 2014
	JavaScript Engine Research team	Suwon, South Korea
	• Performed empirical research on JavaScript engine V8 for mobile devices.	

TECHNICAL SKILLS	**Languages**: Python, C/C++, Java, Scala
	Frameworks: Pytorch, huggingface/transformers, Spark, Hive, MongoDB, Solr

TEACHING ASSISTANT	Probabilistic Reasoning and Learning, *UC San Diego*	2023 Fall
	Statistical Natural Language Processing, *UC San Diego*	2023 Spring
	Advanced Natural Language Processing, *Samsung Electronics*	June, Aug 2020
	Advanced Natural Language Processing, *Samsung Electronics*	June, Aug 2019
	Introduction to Engineering Design, *Sogang University*	2019 Spring
	Automata Theory, *Sogang University*	2018 Fall
	Computer Science and Engineering Laboratory, *Sogang University*	2018 Spring