Geonyeong Son

RESEARCH INTERESTS

My research focuses on human-like NLP, aiming to develop models that think, understand, and learn like humans. My research interests include include Computational Linguistics, Commonsense Reasoning, Human-like Language Understanding, and Learning from Language.

EDUCATION

Hanyang University	Mar 2024 - Feb 2026(expected)
M.S. in Data Science	Seoul, South Korea
 Advisor: Prof. Misuk Kim 	

Sejong University
 Transferred to Hanyang University with my advisor.
 Mar 2023 - Feb 2024
 Seoul, South Korea

Advisor: Prof. Misuk Kim

• Sejong University

Mar 2017 - Feb 2023

B.S. in Data Science

Seoul, South Korea

• Leave of absence for military service: (Army: Dec 2017 - Aug 2019)

o Advisor: Prof. Misuk Kim

RESEARCH EXPERIENCE

Advisor: Prof. Misuk Kim

RESERVED EXTERICE	
• Graduate Research Assistant Hanyang University Advisor: Prof. Misuk Kim	Mar 2024 - Jun 2025 Seoul, South Korea
 Graduate Research Assistant Sejong University Advisor: Prof. Misuk Kim 	Mar 2023 - Feb 2024 Seoul, South Korea
• Undergraduate Research Assistant Sejong University	Jul 2021 - Feb 2023 Seoul, South Korea

PUBLICATIONS

C=CONFERENCE, J=JOURNAL, S=IN SUBMISSION

- [S.2] Geonyeong Son, Misuk Kim. (2025). RTKD: Responsive Teacher Knowledge Distillation with Heterogeneous Students. Manuscript submitted for publication in *EMNLP 2025 (under review)*.
- [S.1] Sangbong Yoo, Jaeyoung Lee, Chanyoung Yoon, Geonyeong Son, Hyein Hong, Seongbum Seo, Soobin Yim, Chanyoung Jung, Jungsoo Park, Misuk Kim, and Yun Jang. (2025). **Data Transformation Strategies to Remove Heterogeneity**. Manuscript submitted for publication in *ACM Computing Surveys (under review)*.
- [J.2] Geonyeong Son, Misuk Kim. (2025). Multi-level prompting: Enhancing model performance through hierarchical instruction integration. *Knowledge-Based Systems*, Vol. 320, (in press), pp. 113545. DOI: 10.1016/j.knosys.2025.113545. (Q1, Impact Factor: 7.2).
- [C.2] Geonyeong Son, Jaeyoung Lee, Misuk Kim. (2025). From Curiosity to Clarity: Exploring the Impact of Consecutive Why-Questions. In Findings of the Association for Computational Linguistics: NAACL 2025.
- [C.1] Jaeyoung Lee, Geonyeong Son, Misuk Kim. (2024). **ESG-Kor: A Korean Dataset for ESG-related Information Extraction and Practical Use Cases**. In Findings of the Association for Computational Linguistics: EMNLP 2024.
- [J.1] Geonyeong Son, Misuk Kim. (2024). A simple and efficient dialogue generation model incorporating commonsense knowledge. Expert Systems with Applications, Vol. 249, Part B, pp. 123584. DOI: 10.1016/j.eswa.2024.123584. (Q1, Impact Factor: 8.5).

Generative, Predictive, and Prescriptive Maintenance Architecture for

Autonomous Production System

National Research Foundation of Korea (NRF)

· Attended and presented at a research paper seminar to analyze and gain comprehensive insight into the project.

Implementation of cloud-based no-code environment front-end tool for SW global market entry in Manufacturing/Finance/Service sectors

Apr 2024 – Jun 2025

Dec 2024 - Jun 2025

Institute of Information & Communications Technology Planning & Evaluation (IITP)

- Developed a framework to classify visualization methods (graph, table, or both) based on user query intent.
- Utilized prompt-based generative AI to generate data and perform human filtering and model filtering.
- Published the paper "Multi-level prompting: Enhancing model performance through hierarchical instruction integration".

• Development of Questions and Answers based on Insurance Product Documents

Apr 2024 - Oct 2024

Hanwha General Insurance Co., Ltd.

• Developed a RAG framework that automatically selects the optimal chunking, embedding, and retrieval strategies based on QA.

• Development of commonsense-aware and emotion-sensitive human-like dialogue system

Jun 2023 - Jun 2025

National Research Foundation of Korea (NRF)

- Enhanced answer accuracy and diversity by injecting commonsense sentence embeddings into the question.
- Published the paper "A Simple and Efficient Dialogue Generation Model Incorporating Commonsense Knowledge".

• Development of heterogeneous fusion data detection and tracking technologies

Nov 2021 - Dec 2023

Institute of Information & communications Technology Planning & Evaluation (IITP)

- Proposed a framework that integrates news images and text to detect fake news.
- Authored the Application section of the paper "Data Transformation Strategies to Remove Heterogeneity (In Submission)".

AWARDS AND HONORS

• Excellence Award, Undergraduate Student Paper Competition, KCC 2022 (Korean Computer Congress) Jun 2022 Korean Institute of Information Scientists and Engineers (KIISE)

• Paper Title: Dialogue Generator with Commonsense based on KoBART

ACADEMIC SERVICES

• Sub Reviewers for: AAAI(2023), ACL(2024, 2025), EMNLP(2024, 2025), NAACL(2025)

TEACHING EXPERIENCE

Teaching Assistant

Dept. of Data Science, Hanyang University

Machine Learning (Instructor: Prof. Misuk Kim)

Mar 2024 - Jun 2024

VOLUNTEER EXPERIENCE

• One-on-One Academic and Socio-Emotional Support Program (Mentoring)

May 2021 - Jun 2021

Gwangjin Education Welfare Center

 Provided one-on-one academic tutoring and socio-emotional mentoring to elementary school students from educationally disadvantaged backgrounds

• Wordvision Regular Sponsorship

Nov 2010 - Nov 2021

Wordvision

Provided regular sponsorship for Worldvision to improve the education, health, and welfare of children worldwide.

CERTIFICATIONS

ADsP(Advanced Data Analytics Semi-Professional)

Apr 2021

Korea Data Agency

- o Certified in data analytics and statistics
- Skilled in visualization and basic machine-learning-driven insights

• SQLD(SQL Developer) Apr 2021

Korea Data Agency

- Certified in relational modeling and SQL
- Familiar with relational database concepts and practical SQL

SKILLS

- Languages: Korean(Native speaker), English(In progress)
- Programming Languages: Python, C, R, Pytorch, Tensorflow

REFERENCES

Misuk Kim

Assistant Professor, Data Science Hanyang University

Email: misukim@hanyang.ac.kr Relationship: [M.S. Advisor]