Yoo Yeon Sung

EDUCATION

University of Maryland Ph.D. Candidate in College of Information Advised by Jordan Boyd-Graber and Naeemul Hassan	2020-Now
Korea University M.S in Industrial Management Engineering Advised by Seoung Bum Kim	2017–2019
Chung-Ang University B.A in English Language and Literature (minor: Computer Science and Engineering)	2013-2017
Cleveland State University Exchange Student in English Language and Literature	2014-2015

SELECTED PUBLICATIONS

Is Your Benchmark Truly Adversarial? AdvScore: Evaluating Human-Grounded Adversarialness Yoo Yeon Sung, Maharshi Gor, Eve Fleisig, Ishani Mondal, and Jordan Boyd-Graber

Nations of the Americas Chapter of the Association for Computational Linquistics (NAACL) 2025

You Make Me Feel Like a Natural Question: Training QA Systems on Transformed Trivia Questions

Tasnim Kabir, **Yoo Yeon Sung**, Saptarashmi Bandyopadhyay, Hao Zou, Abhranil Chandra, and Jordan Boyd-Graber

Empirical Methods in Natural Language Processing (EMNLP) 2024

Not All Fake News is Written: A Dataset and Analysis of Misleading Video Headlines

Yoo Yeon Sung, Jordan Boyd-Graber, and Naeemul Hassan

Empirical Methods in Natural Language Processing (EMNLP) 2023

GRACE: Human-grounded Benchmark for Granular Calibration. Measuring Model's Overconfidence through Human Judgments

Yoo Yeon Sung, Eve Fleisig, Yu Hope, and Jordan Boyd-Graber *Under Review*

VeriTD: Human-aligned Verification of LLM Task Decomposition

Yoo Yeon Sung, Hannah Kim, Dan Zhang

 $Under\ Review$

How the Advent of Ubiquitous Large Language Models Both Stymie and Turbocharge Dynamic Adversarial Question Generation

Yoo Yeon Sung, Ishani Mondal, and Jordan Boyd-Graber

Under Review

Collaborative Insights on Perceptions and Corrections of Misleading News Headlines from Journalists and News Consumers

Md Main Uddin Rony, Saransh Grover, Farhana Uddin, **Yoo Yeon Sung**, Mohammad Ali, Syed Ishtiaque Ahmed, Naeemul Hassan

Under Review

Topical Keyphrase Extraction with Hierarchical Semantic Networks

Yoo Yeon Sung and Seoung Bum Kim

Decision Support Systems (DSS) 2020

AWARDS

Doctoral Students Research Awards

Spring 2022

Awarded for outstanding academic excellence, Chung-Ang University

Chung Woon Shik Scholarship

Spring, Fall 2016

Awarded for outstanding academic excellence, Chung-Ang University

PROFESSIONAL EXPERIENCE

Research Intern, Megagon Labs

2024 May-2024 Aug

Advised by Hannah Kim and Dan Zhang

- Developed human-aligned LLM planner pipeline with task-specific LLM agents to perform complex reasoning and fact-checking tasks that are not solvable with n-shot CoT prompting framework
- Built a verification framework for the LLM planner accounting for human interaction with human-designed subtask taxonomy and demonstrated its generalization across reasoning tasks

Visiting Researcher, KAIST

2020 Jan-2020 Aug

Advised by Jaegul Choo and collaborated with Papago, Naver Labs

- Developed machine translation modules that leverage user logs and post-edits to improve accuracy and provide personalized, context-aware translations tailored to user preferences
- Applied graph models to address multi-hop challenges in commonsense and reasoning QA tasks

Graduate Student Research Assistant, Korea University

2017 May-2019 Aug

- Designed graph-based hierarchical keyphrase extraction models for corpus-level analysis in science domain
- Developed document summarization models with generative and Seq2Seq modules with hierarchical attention mechanism and GANs

MENTORING EXPERIENCE

- 2024 UMD Technica & Hackathon Program Organizer and Mentor
- CMSC 470: Natural Language Processing Teaching Assistant
- INST 326: Object-Oriented Programming Teaching Assistant
- Mentored students for Research
 - Tasnim Kabir (UMD Ph.D)
 - Ishan Upadhyay(IIT Bombay B.S)
 - Christina Zhang (UMD B.S)
 - Emily Kong (UMD B.S)

PROFESSIONAL SERVICE

• Peer Review

ACL 2021, NAACL 2022, EMNLP 2022, ACL ARR (2023, 2024)

• ACL 2023 Student Research Workshop

Served as student mentor

SKILLS

- Programming: Python, R, C++, Git, NodeJS, JavaScript, HTML, CSS, Pandas IATEX
- Languages: Korean (Native), English (Fluent)

REFERENCES

Jordan Boyd-Graber

Professor at University of Maryland

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Naeemul Hassan

Assistant Professor at University of Maryland

**** +1 301-405-9820

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Hal Daumé III

Professor at University of Maryland

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