### Yoo Yeon Sung

#### **EDUCATION**

University of Maryland
Ph.D. Candidate in College of Information
Advised by Jordan Boyd-Graber and Naeemul Hassan

Korea University
M.S in Industrial Management Engineering
Advised by Seoung Bum Kim

Chung-Ang University
B.A in English Language and Literature (minor: Computer Science and Engineering)

Cleveland State University
Exchange Student in English Language and Literature

#### SELECTED PUBLICATIONS

#### VeriTD: Human-aligned Verification of LLM Task Decomposition

Yoo Yeon Sung, Hannah Kim, Dan Zhang

Under Review

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

## 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

#### Topical Keyphrase Extraction with Hierarchical Semantic Networks

Yoo Yeon Sung and Seoung Bum Kim Decision Support Systems (DSS) 2020

#### 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

2024 May-2024 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
- $\bullet$  Developed document summarization models with generative and Seq2Seq modules with hierarchical attention mechanism and GANs

#### **AWARDS**

### Doctoral Students Research Awards Spring 2022

Awarded for distinguished research achievements, University of Maryland

#### Chung Woon Shik Scholarship

Spring 2016

Awarded for outstanding academic excellence, Chung-Ang University

#### Chung Woon Shik Scholarship

Fall 2016

Awarded for outstanding academic excellence, Chung-Ang University

#### 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

 $Undergraduate\ Mentor$ 

#### 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

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#### Jaegul Choo

Professor at KAIST

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