

Yoo Yeon Sung

yysung53@umd.edu
(301) 433 5342

Education	University of Maryland, College Park	Maryland, United States
	<ul style="list-style-type: none">• Ph.D. candidate in Information Studies (iSchool)• Advisor: Dr. Naeemul Hassan and Dr. Jordan Boyd-Graber	Sept. 2020 - Current
	Korea University	Seoul, Republic of Korea
	<ul style="list-style-type: none">• Master of Science in Industrial Management Engineering	Sept. 2017 - Aug. 2019
	Chung-ang University	Seoul, Republic of Korea
	<ul style="list-style-type: none">• Bachelor of Arts in English Language and Literature• Bachelor of Science in Computer Science and Engineering (Minor)	Mar. 2013 - Aug. 2017
Publications	[1] Yoo Yeon Sung , Jordan Boyd-Graber, and Naeemul Hassan Not all Fake News is Written: A Dataset and Analysis of Misleading Video Headlines <i>Empirical Methods in Natural Language Processing</i> , 2023	
	[2] Yoo Yeon Sung , Seoung Bum Kim, Topical keyphrase extraction with hierarchical semantic networks. <i>Decision Support Systems(DSS)</i> , 2019	
	[3] Sang Min Lee, Park Sung Ho, Yoo Yeon Sung , Seoung Bum Kim, Incremental Learning for Nonstationary Traffic Control in Automated Vehicle Systems. <i>the 13th Data Mining and Decision Analytics Workshop, INFORMS 2018 Annual Meeting</i> , 2018. <i>Short Paper</i>	
	[4] Yoo Yeon Sung and Seoung Bum Kim, Machine Learning-Based Health Index for Equipment Malfunction Prediction. <i>Industrial Engineering Management Science Conference, Gyeongju, Republic of Korea</i> , 2017.	
Research Experience	CLIP , Computer Science, University of Maryland	Sept. 2020 - Present
	<i>Research assistant (Advisor: Dr. Jordan Boyd-Graber)</i>	
	<ul style="list-style-type: none">• Crafting Adversarial QA dataset that stumps humans and computers with IR and QA models• Creating a human-in-the-loop question evaluation method with Item Response Theory• Developing fact checking buzzer system to compete with humans using the FEVER system	
	Computational Journalism Lab , iSchool, University of Maryland	Sept. 2020 - Present
	<i>Research assistant (Advisor: Dr. Naeemul Hassan)</i>	
	<ul style="list-style-type: none">• Constructing Video Misleading Headline dataset using novel crowd-sourcing framework• Investigating social media misinformation behaviors with machine learning and statistical models• Developing a misleading headline detection algorithm using multi-modal IR and neural classifier	
	Data and Visual Analytics Laboratory , KAIST	Aug. 2019 - Aug.2020
	<i>Research assistant (Advisor: Dr. Jaegul Choo)</i>	
	<ul style="list-style-type: none">• Developed a QA module by linguistic data augmentation• Enhanced Machine Translation model performance by user-log style adaptation	
	Data Mining and Quality Analytics Laboratory , Korea University	Sept. 2017 - Aug. 2019
Research Projects	<i>Research assistant (Advisor: Dr. Seoung Bum Kim)</i>	
	<ul style="list-style-type: none">• Created document summarization method using GAN and RNN• Developed a unsupervised and supervised Topical Keyphrase Extraction method• Developed hierarchical keyword recommendation system using semantic extraction• Developed HI score classifier to solve Gas Insulated Switchgear failure	
	Ultra-high Speed Laboratory , Chung-ang University	Sept. 2016 - Aug. 2017
	<i>Undergraduate research assistant (Advisor: Dr. Jae Hyun Park)</i>	
	A Leaderboard for Human-Computer Adversarial QA , Dynabench, Meta AI	
	BaitBuster 2.0: Keeping Users Away From Clickbait , NSF	Sept. 2020 - Current
	Neural machine translation with user logs R&D , Papago, Naver	April. 2020 - Aug. 2020
	Conversational platform NLU engine R&D , Hanhwa Systems	Sept. 2018 - Dec. 2018
	Multi-document keyword extraction for Sci&Tech analysis , KISTI	May. 2018 - Oct. 2018
	154kV Substation Maintenance and HI optimization , Hyosung	Nov. 2017 - April. 2018
Professional Experiences	Manufacturing Execution System Development , ISOS Consulting	June. 2015 - Aug. 2015
	<i>Developer Assistant</i>	
	<ul style="list-style-type: none">• Built sub-category engine in MES which enables quantitative analysis of products• Performed statistical analysis to prevent false alarms in manufacturing process	

Technical Skills	<ul style="list-style-type: none"> • Python, Pytorch, Tensorflow, Javascript, nodeJS, Java, C, C++, R, and MATLAB • Gensim, Mallet, Spacy, NLTK, regex
Awards	<p>Doctoral Students Research Awards, University of maryland Spring, 2022</p> <ul style="list-style-type: none"> • This award is to provide funding to assist students who could greatly advance their dissertation proposal or dissertation related research
	<p>Chung Woon Shik Scholarship, Chung-ang University Spring, Fall 2016</p> <ul style="list-style-type: none"> • This scholarship is awarded to students with outstanding academic achievements
Teaching Experiences	<p>Artificial Intelligence Professional Training, Hanhwa Systems April. 2019</p> <p><i>Text mining Educator</i></p>
	<ul style="list-style-type: none"> • Text embedding methods and visualization Covered distributed representation (Word2vec, Doc2vec, Glove), pre-processing, language models, and t-sne visualization • Text Analysis and Application Covered Term-frequency representation (TF-IDF, Bag-of-Words), document clustering and classification, and sentimental analysis