

SANGPIL YOUM

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EDUCATION

University of Florida, Gainesville, FL, USA

Ph D. in Computer Science GPA : 3.88/4.00

May 2022 - present

Advisor: Bonnie J. Dorr

Indiana University, Bloomington, IN, USA

Master of science in Data Science GPA : 3.88/4.00

May 2021

SungKyunKwan University, Seoul, South Korea

Bachelor in Data Science, Library and Information Science GPA : 3.92/4.50 , 4.08/4.50

Feb 2019

University at Buffalo, Buffalo, NY, USA

Exchange Student GPA : 3.93/4.00

Jan 2016 - May 2016

WORK EXPERIENCE

Graduate Teaching Assistant

Department of Computer and Information Science and Engineering at University of Florida

Jan 2023 – Present

- Natural Language Processing (CAP 4641/CIS6930)
- Developed and operated class projects

Graduate Research Assistant

Department of Computer and Information Science and Engineering at University of Florida

Mar 2022 – Present

- Develop pragmatic markers (politeness, formality) detection model for communication effectiveness
- Developed generalizable algorithm for the Semantic Role Labeling (SRL) task in mid-resource languages
- Established *Natural Language Processing & Culture (NLP&C)* lab environment

Instructor

Department of Computer and Information Science and Engineering at University of Florida

Spring 2024

- Natural Language Processing (CAI 6307)

Graduate Researcher

Wissee

Oct 2020 – May 2021

- Built and compared the performance between Deep learning model (BERT, LSTM) and machine learning model (Hidden Markov Model) for Name Entity Recognition.
- Processed Twitter data by applying NLP techniques with Spacy and NLTK and compared the efficiency between them

PUBLICATIONS

Peer-Reviewed Articles

- Khan, Y., Wu, X., **Youm, S.**, Ho, J., Shaikh, A., Garciga, J., Sharma, R., Dorr, B. DETQUS: Decomposition-Enhanced Transformers for QUery-focused Summarization, *The 2025 Annual Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics (NAACL)*.
- Kang, P., Ko, Y., **Youm, S.**, Chun, Y., Davis, S., Connaughton, D. Application of Machine and Deep Learning Techniques on Sport Non-Fungible Token Tweets: Exploration of Perceived Values and Risks, *International Journal of Sports Marketing and Sponsorship*. 2025.
- Jayaweera, C., **Youm, S.**, Dorr, B. AMREx: AMR for Explainable Fact Verification, *EMNLP Workshop FEVER 2024* . <https://doi.org/10.18653/v1/2024.fever-1.26>
- Zhang, D., Xiao, B., Gao, C., **Youm, S.**, Dorr, B. Modeling Bilingual Sentence Processing: Evaluating RNN and Transformer Architectures for Cross-Language Structural Priming, *EMNLP Workshop MRL 2024* . <https://doi.org/10.18653/v1/2024.mrl-1.8>
- Martinez, M., Schmer-Galunder, s., Liu, Z., **Youm, S.**, Jayaweera, C., Dorr, B. Balancing Transparency and Accuracy: A Comparative Analysis of Rule-Based and Deep Learning Models in Political Bias Classification, *EMNLP Workshop SICON 2024* . <https://doi.org/10.18653/v1/2024.sicon-1.7>
- **Youm, S.**, Mather, B., Jayaweera, C., Prada, J., Dorr, B. DAHRS: Divergence-Aware Hallucination-Remediated SRL Projection. *The 29th International Conference on Natural Language & Information Systems (NLDB)*. 2024. https://doi.org/10.1007/978-3-031-70239-6_29

- Koo, S., **Youm, S.**, Shin, J. Cycle-GAN-based synthetic sonar image generation for improved underwater classification *Ocean Sensing and Monitoring XVI*. 2024. <https://doi.org/10.1117/12.3016056>
- Jang, S. H., **Youm, S.**, & Yi, Y. J. Anti-Asian Discourse in Quora: Comparison of Before and During the COVID-19 Pandemic with Machine- and Deep-Learning Approaches *Race and Justice*. 2023; 13(1): 55–79. <https://doi.org/10.1177/21533687221134690>
- Jang S. H., Gerend MA, **Youm S.**, Yi Y. J. Understanding coronavirus disease 2019 (COVID-19) vaccine hesitancy: Evidence from the community-driven knowledge site Quora. *DIGITAL HEALTH*. 2022;8. <https://doi.org/10.1177/20552076221145426>
- Kim J, **Youm S.**, Shan Y, Kim J. Analysis of Fire Accident Factors on Construction Sites Using Web Crawling and Deep Learning Approach. *Sustainability*. 2021; 13(21):11694. <https://doi.org/10.3390/su132111694>

Manuscript under review

- **Youm, S.**, Han, C., Yoo, H., Jang, S. H., Dorr, B. “I Still Need Your Help”: Online Information Seeking Behavior Among International Students on Reddit, submitted to ToCHI 2025.
- **Youm, S.**, Yoo, N., Jang, S. H., Dorr, B. How Mixed Emotions on Reddit Predict Depressive Symptoms in Asian American Families, submitted to Journal of Computational Social Science.
- **Youm, S.**, Jang, S.H., Kwak, H., Choi, J., Yi, Y.J. Cross-Cultural Vaccine Perceptions: Comparing COVID-19 Vaccine Public Discourse in the U.S. and South Korea using Natural Language Processing, submitted to the International Journal of Communication

WORKING PROJECTS

Social Bias Detection model using SRL for identifying Cultural Divergence

- Develop social bias detection model using Semantic Role Labeling (SRL) for cultural divergence

RAG for QA: Does linguistic information helps?

- Develop RAG-based system using POS/NER/SRL for QA tasks.

PROFESSIONAL SERVICE

Peer Review

- Computers in Human Behavior
- International Conference on Computational Social Science (IC2S2)

PRESENTATIONS

Academic Conference

- **Youm, S.**, Han, C.E., Jang, S.H. July 2024. Information-seeking Behavior Among International Students on Reddi: A Comparative Analysis Before and After Start of COVID-19. *10th International Conference on Computational Social Science (IC2S2)*
- **Youm, S.**, Yoo, N., Jang, S.H. July 2024. Beyond Positive or Negative: How Mixed Emotions on Reddit Predict Depressive Symptoms in Asian American Families. *10th International Conference on Computational Social Science (IC2S2)*
- **Youm, S.**, Jang, S. H., Yi, Y.J. April 2022. Understanding COVID-19 Vaccine Hesitancy: Evidence from Quora. *In proceeding of Society of Behaviour Medicine*

COURSEWORK

Programming and Computer Science: Computer Architecture Principles, Programming Language, Advanced Data structure, Algorithms, Advanced Database System, Operating System, Designing Database Systems

Mathematical and Statistical Foundation: Probability and Statistics, Linear algebra, Time series analysis, Statistical Reasoning

Artificial Intelligence and Application: Natural Language Processing, Deep Learning, Data Mining, Computational Social Science, Network Science, Big Data Analytics, Social Data Analytics, Introduction to Data Science, Data Science and Linguistics, Health Informatics, Information Analysis and Evaluation, Semantic Web system

LEADERSHIP, AWARDS AND OTHERS

Excellent Project Award in Python Programming Bootcamp

August 2017

SungKyunKwan University(SKKU), Seoul, South Korea

Outstanding Performance Scholarship Awards

April, September 2017

SungKyunKwan University(SKKU), Seoul, South Korea

President of the student council

December 2016 – December 2017

Department of Data Science and Library and Information Science

Army Sergeant Discharge in Full Time

December 2011 - September 2013

Republic of Korea Army, Pocheon, South Korea

REFERENCES

Available upon request