# SANGPIL YOUM

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## **EDUCATION**

University of Florida, Gainesville, FL, USA

Ph D. in Computer Science GPA: 3.88/4.00

Advisor: Bonnie J. Dorr

Mar 2022 - present

Indiana University, Bloomington, IN, USA

May 2021

Master of science in Data Science GPA: 3.88/4.00

SungKyunKwan University, Seoul, South Korea

Feb 2019

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

University at Buffalo, Buffalo, NY, USA

Jan 2016 - May 2016

Exchange Student GPA: 3.93/4.00

# WORK EXPERIENCE

Instructor Spring 2024

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

• Natural Language Processing (CAI 6307)

# **Graduate Teaching Assistant**

Jan 2023 - Present

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

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

# **Graduate Research Assistant**

Mar 2022 - Present

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

- Developed generalizable algorithm for the Semantic Role Labeling (SRL) task in low/mid-resource languages
- Established Natural Language Processing & Culture (NLP&C) lab environment

Graduate Researcher Oct 2020 – May 2021

Wissee

- 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)*.
- Jayaweera, C., Youm, S., Dorr, B. AMREx: AMR for Explainable Fact Verification, EMNLP Workshop FEVER 2024
- 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
- 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
- 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
- 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., Jang, S. H., Dorr, B. "I Still Need Your Help": Online Information Seeking Behavior Among International Students on Reddit, submitted to CHI 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 Journal of Health and Social Behavior.

# 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

Sung Kyun Kwan 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