ALJIA YUAN

Phone: (412) 403-0421 1275 E. 10th St **Email:** yuana@iu.edu Bloomington, IN 47405

EDUCATION

Doctor of Philosophy (Ph.D.)

Indiana University, Kelley School of Business 2021 – 2026 (Expected)

Advisor: Dr. Sagar Samtani

Major: Management Information Systems

Minor: Data Science

Master of Science (M.S.)

Duke University, Fuqua School of Business 2019 - 2020

Major: Quantitative Management, Business Analytics

Minor: Finance

Bachelor of Science (B.S.)

Centre College 2015 - 2019

Major 1: Mathematics

Major 2: Economics and Finance

RESEARCH INTERESTS

- 1. **Applications:** health informatics, mental health analysis, sensor signal analysis
- 2. **Methods:** artificial intelligence, machine learning, deep learning, large language models

RESEARCH EXPERIENCE

Indiana University, Bloomington, IN

2021 - Present

Research Associate

- Depression detection using sensor signal data via deep learning approaches.
- Sensor-based mental health analysis via privacy-preserving approaches.
- Developing artificial intelligence (AI)-enabled mental health therapist via large language models.

Centre College, Danville, KY

2018

Research Assistant, Department of Mathematics

• Symplectic matroids, circuits, and signed graphs research program

TEACHING EXPERIENCE

Centre College, Danville, KY

2017 - 2018

Teaching Assistant, Department of Mathematics

- Calculus I and Calculus III
- Conducted weekly Q&A homework sessions and assisted class material preparation

WORKING JOURNAL PAPERS

- 1. <u>A. Yuan</u>, H. Zhu, E. Garcia, and S. Samtani, "Detecting the Human Behaviors Associated with Depression via Sensor Signal Analysis: A Multiview-based Self-Attention Approach" *Targeted at Information Systems Research (ISR)*.
- 2. <u>A. Yuan</u>, S. Samtani, H. Zhu, and E. Garcia, "Privacy-Preserving Depressive Behavior Detection Using Sensor Signal Data: An Attention-based Knowledge Distillation Approach".

REFEREED CONFERENCE PAPERS

- 1. <u>A. Yuan</u>, H. Zhu, E. Garcia, and S. Samtani, "Detecting the Human Behaviors Associated with Depression via Sensor Signal Analysis: A Multiview-based Self-Attention Approach" *2023 Conference on Health IT and Analytics (CHITA)*. Best Student Paper Award.
- 2. <u>A. Yuan</u>, H. Zhu, S. Samtani, E. Garcia, and M. Xu "Identifying Depressive Behaviors Using Privacy Preserving Passive Sensor Signal Data" *2023 IEEE International Conference on Digital Health (ICDH)*.
- 3. <u>A. Yuan</u>, H. Zhu, E. Garcia, and S. Samtani, "Detecting the Human Behaviors Associated with Depression via Sensor Signal Analysis: An Agreement-based Self-Attention Deep Learning Approach" *2022 INFORMS Workshop on Data Science (WDS)*. Best Student Paper Award Nominee.

INVITED PRESENTATIONS

1. INFORMS 2022 Annual Meeting. **Presentation Title:** Detecting the Human Behaviors Associated with Depression via Sensor Signal Analysis. Indianapolis, IN. Oct.16, 2022.

PROFESSIONAL SERVICE

Reviewer

- International Conference on Information Systems (ICIS), 2023
- INFORMS Workshop on Data Science (WDS), 2023
- Pacific Asia Conference on Information Systems (PACIS), 2023
- INFORMS Workshop on Data Science (WDS), 2022. Best Reviewer Award.
- INFORMS Conference on Information Systems and Technology (CIST), 2022
- International Conference on Information Systems (ICIS), 2022

Volunteer

- INFORMS Conference on Information Systems and Technology (CIST), 2022
- INFORMS Workshop on Data Science (WDS), 2022
- International Conference on Information Systems (ICIS), 2021
- INFORMS Workshop on Data Science (WDS), 2021

PROFESSIONAL AFFILIATIONS

- 1. Association of Information Systems (AIS), Student Member
- 2. Association of Computing Machinery (ACM), Student Member

- 3. Institute for Operations Research and the Management Sciences (INFORMS), Student Member
- 4. Institute of Electrical and Electronics Engineers (IEEE), Student Member

AWARDS AND RECOGNITION

- 1. Best Student Paper Award, Conference on Health IT and Analytics, 2023
- 2. Participation in Doctoral Consortium, Conference on Health IT and Analytics, 2023
- 3. Best Student Paper Award Nominee, INFORMS Workshop on Data Science, 2022
- 4. Best Reviewer Award, INFORMS Workshop on Data Science, 2022
- 5. Membership in Phi Beta Kappa Honor Society, 2019
- 6. Membership in Pi Mu Epsilon Honor Society, 2019
- 7. Colonel Scholarship, Centre College, 2015 2019

COMPUTER SKILLS

Python, R, SQL, Tableau, Matlab, Stata, SPSS, Mathematica, Qualtrics, NodeXL

PROFESSIONAL REFERENCES

1. Sagar Samtani, Ph.D. (Dissertation Committee Chair)

Assistant Professor and Grant Thornton Scholar

Department of Operations and Decision Technologies

Kelley School of Business, the Indiana University

1275 E. 10th St, HH 4111

Bloomington, IN 47405

E-mail: ssamtani@iu.edu

Phone Number: +1 (520)-971-4274

2. Hongyi Zhu, Ph.D.

Assistant Professor of Information Systems

Department of Information Systems and Cyber Security

Carlos Alvarez College of Business, the University of Texas at San Antonio

1 UTSA Circle

San Antonio, TX 78249

Email: hongyi.zhu@utsa.edu,

Phone Number: +1 (210)-458-8030

3. Alan Dennis, Ph.D.

Professor of Information Systems

Department of Operations and Decision Technologies

Kelley School of Business, the Indiana University

1309 E. 10th St, HH 4100

Bloomington, IN 47405

Email: ardennis@indiana.edu

Phone Number: +1 (812)-855-2691