## Xiaoyu Liu

(Pronouns in use: she/her/hers)
Curriculum Vitae

### **EDUCATION**

Ph.D., Biomedical and Health Informatics

Dec 2022

University of Wisconsin Milwaukee, USA

M.B.A., Business Administration

May 2017

Middle Tennessee State University, USA

**B.B.A.**, Business Administration

Jun 2016

North China University of Technology, China

## PROFESSIONAL EXPERIENCE

Assistant Professor Aug 2023 to Present

Department of Health Management and Policy College for Public Health and Social Justice Saint Louis University

Assistant Lecturer Aug 2022 to Aug 2023

School of Health Sciences College of Human and Health Sciences Southern Illinois University Carbondale

# **RESEARCH INTERESTS**

My primary interest is to identify unmet healthcare needs and improve health outcomes with trustworthy, effective health IT solutions.

#### Theories & Methodologies:

- Data Science and Informatics: Natural Language Processing, Applied Machine Learning and Data Mining
- Health Design Thinking, Innovation in Healthcare Service Delivery, Mixed Methods Research Topics:
- Health Information on the Internet/Social media, Infodemic, Ageing, Cardiovascular, Maternal Health, Clinical Decision Support System, mHealth, Serious Game, Assisted Living Technology

# **RESEARCH PAPERS**

## Published/Accepted

• Tong, L., Luo, J., Adams, J., Osinski, K., Liu, X., & Friedland, D. (2023).

 Review of Domestic and Foreign Theory and Practical Experience of Health Care Service for the Aged

Note: The reports above have been reviewed and some have been adopted by the Beijing government for formulating and implementing aging care policies.

# **CONFERENCES**

• Tong, L, Liu, X, Luo, J (2023),

## **Graduate Research Assistant**

Jan 2020 to May 2022

College of Nursing

- American Medical Informatics Association: AMIA
- Academy Health
- Institute for Healthcare Informatics Innovation and Excellence

## PROFESSIONAL SERVICES

#### Reviewer

- Journal of Medical Internet Research (JMIR)
- JMIR Serious Games
- JMIR Human Factors
- AMIA Informatics Summit 2023
- APHA Summit and Expo 2023

#### **Invited Talks**

- Podcast: AMIA as a Catalyst for Collaboration. AMIA, Aug 24, 2021
- Invited Talk: AI-based techniques for Combating Health Misinformation. Northwestern Mutual, Nov 23, 2021.
- Invited Talk: The impact of Artificial Intelligence on Human Society. Sociology Program, Behavioral Science Department. Utah Valley University. (April 13,2023)

## DEPARTMENT/UNIVERSITY SERVICES

Linive	rcity	of So	uthern	Illinois	Carh	alehno
Unive	TSILV	01 50	umern		Carn	onuaie

Graduate Student Mentor Aug 2022 to Aug 2023

Fnu Muskan, Master Student of Health Administration Ugochukwu G Ezigbo, Master Student of Health Informatics

Student Scholarship Committee Chair Feb 2023 to March 2023

Health Care Management Program

School of Health Sciences

Program Director: Sandra Collins, PhD

Dec 2022 to Feb 2023 Master of Health Informatics Curriculum Specialist

Health Care Management Program

School of Health Sciences

Program Director: Sandra Collins, PhD

#### Search Committee Member

- Nov 2022 to Jan 2023 • Health Care Management Program
- Dental Hygiene Program
- Radiology Sciences Program
- Occupational Therapy Doctorate Program

School of Health Sciences

School Director: Scott Collins, PhD

#### **University of Wisconsin Milwaukee**

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## **SKILLS**

### **Technical Skills**

- Programming languages: Python, Java
- Data Mining & Machine Learning: TensorFlow, Keras, Scikit-Learn, NumPy, Seaborn, Weka, LIME, SHAP, MATLAB
- Natural Language Processing: spaCy, NLTK, Word2Vec, GloVe
- Statistical Software: SPSS, MINITAB
- Prototyping: Figma
- Data Visualization: Tableau
- Database: Access, Oracle

### **Soft Skills**

- Interdisciplinary team collaboration
- Consulting/Strategy Analysis /Proposal
- Needs/Problem Identification
- System Troubleshooting
- Quality Control
- Motivation