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

University of Southern Illinois Carbondale
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

Master of Health Informatics Curriculum Specialist   Dec 2022 to Feb 2023
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

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