

Yanwei Jin

Email: jin00330@umn.edu [Homepage](#) Phone: +1-763-900-4991

Education

University of Minnesota, Twin Cities
Master of Science in Biostatistics (Expected)

Minneapolis, MN, USA
Sep 2024 – Jun 2026

Peking University
Bachelor of Science in Nursing

Beijing, China
Sep 2017 – Jul 2022

Research Experience

Emergency Sepsis Risk Prediction

25% part-time Research Assistant, Supervisor: Dr. Feng Xie

University of Minnesota
Nov 2024 – present

- Utilized the MIMIC-IV-ED and UMN datasets to identify and classify sepsis patients.
- Implemented AutoScore and other predictive models to evaluate AUROC performance.
- Developed a standardized scoring system for emergency department sepsis prediction.
- Assessed model fairness using fairness metrics to ensure unbiased predictions.

Drug Overdose Deaths in Older Black Populations

25% part-time Research Assistant, Supervisor: Dr. Xiao Zang

University of Minnesota
Oct 2024 – present

- Conducted descriptive research using CDC datasets to analyze the relationship between cocaine use and overdose deaths in older Black populations.
- Utilized R packages for data visualization and figure generation.
- Applied statistical methods to interpret and present findings.

Cuff-less Blood Pressure Estimation

Full-time Research Assistant, Supervisor: Prof. Yuanting Zhang

COCHE Hong Kong
Jan 2023 – Aug 2024

- Collected and processed multimodal physiological signals (ECG, BP, temperature).
- Developed and assessed deep learning models (LSTM, Transformer) for BP estimation.

Public Risk Perception and Coping Behavior to COVID-19

Part-time Research Assistant, Supervisor: Prof. Hongyu Sun

Peking University
Jul 2021 – Dec 2022

- Conducted interviews and analyzed transcripts to assess risk perception and behaviors.
- Performed meta-analysis to synthesize data and identify heterogeneity sources.

Publications

1. **Y. Jin**, T. Xiang, Z. Liu, L. Clifton, D. Clifton, N. Ji, and Y. Zhang. "Unobtrusive and Continuous Measurements of Dynamic Beat-to-beat Blood Pressure Using Multimodal Physiological Signals." *IEEE Journal of Biomedical and Health Informatics (JBHI)*, 2024. **Under review**.
2. T. Xiang, Z. Liu, **Y. Jin**, N. Ji, and Y. Zhang. "Wearables Cardiovascular Monitoring: Effects of Cold Pressor Test on Heart Rates Estimated From ECG, PPG, and IPG Signals." *Journal of Robotics & Automation*, 2024.
3. H. Chen, L. Lyu, Z. Zeng, **Y. Jin**, Y. Zhang. "Beat-to-beat continuous blood pressure estimation with optimal feature set of PPG and ECG signals using deep recurrent neural networks." *Vessel Plus*, 2023.
4. **Y. Jin**, H. Sun, Y. Ji. "Public risk perceptions and coping behaviors in novel coronavirus pneumonia outbreaks: a systematic review." *Chinese Journal of Nursing Education*, 2023.

Work Experience

Nurse Trainee at Peking University First Hospital

Jul 2021 – May 2022

- Rotated through various departments, including internal medicine, surgery, obstetrics, and pediatrics, performing clinical tasks such as preoperative preparation, chronic disease management, maternal and newborn care, and cardiopulmonary resuscitation.
- Recorded detailed patient information in the **e-health** system.

Awards and Honors

- Third Prize in National College Student Challenge Cup Competition (2021)
- First Prize in National College Student Innovative Experimental Project (2020)
- Second Prize China Undergraduate Mathematical Contest in Modeling (2019)
- Peking University Social Welfare Scholarship (2019)

Skills

Python, Pytorch, R, LaTeX, STATA, NVIVO, Clinical Skills, Signal Processing Skills.