Yanwei Jin

Education

University of Minnesota, Twin Cities

Master of Science in Biostatistics (Expected)

Sep 2024 – Jun 2026

Peking University

Bachelor of Science in Nursing

Beijing, China Sep 2017 – Jul 2022

Research Experience

Cuff-less Blood Pressure Estimation

COCHE Hong Kong

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

Jan 2023 – Aug 2024

- Collected multimodal signals, including ECG, PPG, IPG, BP, and temperature in the lab.
- Preprocessed signals and extracted features from their waves and inter-signal relationships.
- Developed **deep learning** models (LSTM, Transformer) for BP estimation.
- Evaluated model performance against AAMI standards, BHS grades, and EHS criteria.

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 to explore changes in perception and actions taken during COVID-19.
- Analyzed interview transcripts to identify patterns in risk perception and coping behaviors.
- Performed **meta-analysis** to combine data from similar studies, yielding stable results and identifying sources of heterogeneity.

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.