FANG, Lanran

Phone: +1 8729012276 **Email**: lanranfang@uchicago.edu

EDUCATION

- **Jiangxi University of Finance and Economics** 09/2019 – 06/2023
  B.Economics in **Economic Statistics**
  GPA:**91.58**/100
- **AJOU University** 08/2021 – 01/2022
  Exchange Program in **Economics**

RESEARCH EXPERIENCES

- **Gradient-based Sparse Elliptical Component Analysis** 09/2022 – 06/2023
  Independent Research Advisor: Dr. Chuanquan Li
  - Developed a new iteration method based on the Gradient Fantope project and selection Algorithm.
  - Applied this algorithm to the data that satisfies the ellipsoidal distribution.
  - Collaborating with senior students in the same group to try to extend this method to online learning.
- **The Research of Open Source Ecosystem Based on Complex Network: R Languages as an Example** 08/2021 – 05/2022
  Research Member PI: Dr. Chuanquan Li
  - Intensively involved in data collection and visualization using Python and R.
  - Used the D-SCORE model to conduct community detection and dynamic evolution of R.
  - Undertook the writing several parts of the paper and presented it to The 15th China-R Conference.
- **Interaction between R and C++ for Fast Computation of High-dimensional Matrices** 12/2020 – 02/2021
  Research Member PI: Professor Xiaohui Liu
  - Conducted literature review made generalizations to support our coding process.
  - Operated our team's code using C++ and applied it to matrix manipulation.

WORK EXPERIENCES

- **Zhejiang AI Healthcare Innovation Center** 07 – 09/2022
  Intern of Algorithm Team
  - Involved in a project predicting diseases that young people may suffer from.
  - Tested models (i.e., the Cox model, the multi-factor model, and the Fine Gray competitive risk model) based on the data stored in the Navicat database extracted by SQL.
  - Collaborated with colleagues on writing and filing a patent for review.
- **Zhejiang AI Healthcare Innovation Center** 08 – 09/2021
  Intern of Algorithm Team
  - Assisted in optimizing the algorithm for patient scheduling among hospital departments and writing up patents descriptions about medical big data.
  - Used different algorithms to compute local optimal solutions and compared with true values.

PUBLICATION

- Li, C., **Fang, L.**, Su, Q., Liu, X. & Sheng, J. The Research of Open Source Ecosystem Based on Complex Network: R Languages as an Example[J]. *Journal of Systems Science and Complexity* (In Chinese), 2023.
- Fang,Z., Fu, Y., **Fang, L.**, etc. Combination risk assessment models, methods, and applications applicable to disease risk assessment [P] Zhejiang Province: CN115602323B, June 6, 2023