CUI ZEYANG

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EDUCATION

The University of Hong Kong

- MSc in Computer Science 09/2022- now

Lanzhou University (national project of 985 & 211) **China(Mainland)**

- BEng in Computer Science and Technology (Data Science) 09/2018-06/2022

GPA 3.54

PROFESSIONAL EXPERIENCE

Study on the complex biological network of the interaction between typical organic pollutant components and key proteins in the atmosphere 07/2020-10/2021

- Participate in the completion of two academic papers (see below). (National Natural Science Foundation of China: (General program Grant No.21976073)

Prediction of Drug Repositioning Based on Matrix Completion 12/2020-05/2021

- Instructor: Prof. Yuan Yongna
- As a peer tutor,Which have full authority to supervise the graduation thesis of a undergraduate Student.

Study on Alzheimer's Disease-related Compounds - Target Relationships Doubly Driven by Collaborative Network and Multi-tasking Learning 10/2019-02/2020

Analysis of COVID-19 Epidemic Transmission Control Based on Influence Maximization and Improved SEIR Model 02/2020-05/2020

- Responsible for code optimization and writing the fund book and some related work.

PUBLICATION(During the undergraduate period)

- *JOURNAL OF CHEMICAL INFORMATION AND MODELING,* ISSN 1549-9596 (IF: 6.162), co-first author
  Quantum Chemical Calculations with Machine Learning for Multipolar Electrostatics Prediction in RNA: An Application to Pentose, Yuan, Yongna, Yan, Haoqiu, Cui, Zeyang, Liu, Zhenyu, Su, Wei, Zhang, Ruisheng, DOI: 10.1021/acs.jcim.2c00747
- *JOURNAL OF HAZARDOUS MATERIALS*, ISSN 0304-3894 (IF: 10.588)
  Effects of polyethylene microplastics on cell membranes: A combined study of experiments and molecular dynamics simulations,Weilin Wang, Jinlong Zhang, Zhiqiang Qiu, Zeyang Cui, Ningqi Li, Xin Li, Yawei Wang, Haixia Zhang, Chunyan Zhao, DOI: 10.1016/j.jhazmat.2022.128323.
- *CHEMOSPHERE*, ISSN 0045-6535 (IF: 8.943)
  Identification of molecular initiating events and key events leading to endocrine disrupting effects of PFOA: Integrated molecular dynamic, transcriptomic, and proteomic analyses, Ruining Guan, Feng Luan, Ningqi Li, Zhiqiang Qiu, Wencheng Liu, Zeyang Cui, Chunyan Zhao, Xin Li, DOI: 10.1016/j.chemosphere.2022.135881

INTERNSHIP EXPERIENCE

Academic Research in School of Pharmacy, Lanzhou University 07/2020-10/2021

- Participated in the work of the National Natural Science Foundation of China (General program, Grant No.

21976073) *Research on the Complex Biological Network of the Role of Typical Organic Pollutants and Key Proteins in the Atmosphere*

- Responsible for data preprocessing and model algorithm optimization in the article *Effects of Polyethylene Microplastics on Cell Membranes: A Combined Study of Experiments and Molecular Dynamics Simulations*
- Responsible for MD data processing in the article *Identification of Molecular Initiating Events and Key Events Leading to Endorse Disrupting Effects of PFOA: Integrated Molecular Dynamic, Transcriptomic, and Proteomic Analyses*

Blockchain Technology Research Center, Shenzhen University 07/2019-08/2019

- Participated in the national key research and development program *Research and Demonstration of Key Technologies of Urban Multi-plan Data Fusion and Dynamic Cognition*
- Assisted R&D team in collecting basic data and translating English and Chinese materials

PROFESSIONAL SKILLS

- Good at Python, Matlab, and Drug-Target prediction.
- Skilled at machine learning, neural network, graph neural network, and computational chemistry