YUANYUAN ZHANG

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EDUCATION

Purdue University, West Lafayette, IN, US	2021.9 – present
<i>Ph.D student</i> in Computer Science, GPA: 3.8/4.0 Area: Computational Biology, Machine Learning, Deep Learning	
University of Chinese Academy of Sciences, Beijing, China	2018.8 - 2021.6
Master student in Computer Science Area: Natural Language Processing, Machine Learning, Deep Learning	
Sichuan University, Sichuan, China Bachelor student in Computer Science and Technology	2014.9 – 2018.6

THONORS AND AWARDS

D.E. Shaw DESRES Doctoral Fellowship, New York, US	2024.3
Graduate Student Scholarship of ICT CAS (Top 1%), Beijing, China	2018.9-2021.6
Outstanding Graduate of Sichuan University (Top 1%) Chengdu, China	2018.6
Outstanding Student of Sichuan University (Top 3%), Chengdu, China	2015.9-2018.6
National Endeavor Fellowship (Top 1%), Sichuan Universiy, Chengdu, China	2016.9-2017.6

EXPERIENCE

KiharaLab, Purdue University West Lafayette, IN, US

2022.5 - Present

Research assistant

Protein structure prediction based on Deep Learning

• Distance-AF: Accurately predict protein structures with distance constraints, producing more confident structures on Cryo-EM, NMR and GPCR.

Structure evaluation on Cryo-EM using Deep Learning

• DAQ-ATOM: Estimating atomic structure with Deep Learning to help experimental researchers to revise their deposited structures.

Department of Computer Science, Purdue University West Lafayette, IN, US 2021.9 – Present Teaching assistant for CS38003, CS50023, CS25100

Key Laboratory of Nerwork Data Science and Technology, CAS Beijing, China 2019.8 – 2021.6 *Research assistant*

Sentiment analysis and knowledge graph network by Deep Learning

Xiaomi Co., Ltd. Beijing, China 2019.3 – 2019.7

Machine Learning Algorithm Intern

Optimize recommendation algorithm based on feeds information

Institute of Automation, CAS Beijing, China 2016-6 – 2017.3

Research Intern

Intelligent education based on Deep Learning

PUBLICATIONS

- Zhang, Y., Zhang, Z., Kagaya, Y., Terashi, G., Zhao, B., Xiong, Y., and Kihara, D. (2023). Distance-AF: Modifying Predicted Protein Structure Models by Alphafold2 with User-Specified Distance Constraints. bioRxiv, 2023-12.
- Yuanyuan Z., Xiao W., Zicong Z., Yunhan H., and Daisuke K., 2023. Assessment of Protein-Protein Docking Models Using Deep Learning. Methods in Mol. Biol., in press, (2023).
- Gagliardi, L., Raffo, A., Fugacci, U., Biasotti, S., Rocchia, W., Huang, H., Amor, B.B., Fang, Y., **Zhang, Y.**, Wang, X. and Christoffer, C., 2022. SHREC 2022: Protein–ligand binding site recognition. Computers & Graphics, 107, pp.20-31.
- Wang, Xiao, **Yuanyuan Zhang**, Shengnan Yu, Xiwei Liu, and Fei-Yue Wang. "Computerized adaptive English ability assessment based on deep learning." In Image and Video Technology: PSIVT 2017 International Workshops, Wuhan, China, November 20-24, 2017, Revised Selected Papers 8, pp. 158-171. Springer International Publishing, 2018.
- Wang, Xiao, Yuanyuan Zhang, Shengnan Yu, Xiwei Liu, Yong Yuan, and Fei-Yue Wang. "E-learning recommendation framework based on deep learning." In 2017 IEEE international conference on systems, man, and cybernetics (SMC), pp. 455-460. IEEE, 2017.

SKILLS

- Expertise: Python, Deep Learning, Machine Leanring, Pytorch, TensorFlow
- Capable: Hadoop, Spark, C, C++, Java, Matlab