

YUANYUAN ZHANG

✉ zhang038@purdue.edu · ☎ (+1) 7657758429 · 🌐 Website · 📄 Google Scholar ·

🎓 EDUCATION

Purdue University, West Lafayette, IN, US 2021.9 – present

Ph.D student 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 2014.9 – 2018.6

Bachelor student in Computer Science and Technology

🏆 HONORS 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 University, 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 Network 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.**, Wang, X., Li, S., Terashi, G., Nakamura, T. and Kihara, D. (2023). DAQ-ATOM score for protein models evaluation from high-resolution Cryo-EM maps. In submission.
- **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.
- **Zhang, Y.**, Wang, X., Zhang, Z., Huang, Y., and Kihara, D., 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, X., **Zhang, Y.**, Yu, S., Liu, X., Wang, F. Y. (2018). 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.
- Wang, X., **Zhang, Y.**, Yu, S., Liu, X., Yuan, Y., Wang, F. Y. (2017, October). E-learning recommendation framework based on deep learning. In 2017 IEEE international conference on systems, man, and cybernetics (SMC) (pp. 455-460). IEEE.

SKILLS

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