# Yu XU, Ph.D. Candidate

✉ csyuxu@comp.hkbu.edu.hk
🌐 https://yu-xu.netlify.app/
🎓 https://scholar.google.com.hk/citations?user=CUmx8t8AAAAJ
ⓘD https://orcid.org/0009-0005-4873-1659

## Academic Employment History

2021 – 2023    🔖 **Senior Research Assistant.** Department of Computer Science, Hong Kong Baptist University.

## Education

2023 –    🔖 **Ph.D. Computer Science, Hong Kong Baptist University**.

2020 – 2021    🔖 **M.Sc. Computer Science, Hong Kong Baptist University**

2013 – 2017    🔖 **B.Eng. Measurement and Control Technology and Instrument, Beijing Normal University, Zhuhai**

## Research Publications

### Journal Articles

1. Li, Zeming, **Xu, Yu**, Chowdhury, Debajyoti, Yip, Hip Fung, Wang, Chonghao, Zhang, Lu, "Causal transformer for learning embeddings from structured medical history records and multi-source data integration for complex disease risk prediction," *Interdisciplinary Sciences: Computational Life Sciences*, pp. 1–14, 2025.

2. Wang, Zirui, Xu, Ke, Liu, Yang, **Xu, Yu**, Zhang, Lu, "Mitigation of multi-scale biases in cell-type deconvolution for spatially resolved transcriptomics using harmodecon," *Bioinformatics*, vol. 41, no. 9, btaf451, 2025.

3. Xu, Ke, **Xu, Yu**, Wang, Zirui, Zhou, Xin Maizie, Zhang, Lu, "Stdyer enables spatial domain clustering with dynamic graph embedding," *Genome Biology*, vol. 26, no. 1, p. 34, 2025.

4. **Xu, Yu**, Wang, Chonghao, Xu, Ke, Ding, Yi, Lyu, Aiping, Zhang, Lu, "Trafica: An open chromatin language model to improve transcription factor binding affinity prediction," *Bioinformatics*, vol. 41, no. 11, btaf469, 2025.

5. **Xu, Yu**, Chen, Jiaxing, Lyu, Aiping, Cheung, William K, Zhang, Lu, "Dyndeepdrim: A dynamic deep learning model to infer direct regulatory interactions using time-course single-cell gene expression data," *Briefings in Bioinformatics*, vol. 23, no. 6, bbac424, 2022.

### Conference Proceedings

1. Li, Zeming, **Xu, Yu**, Chowdhury, Debajyoti, Yip, Hip Fung, Wang, Chonghao, Zhang, Lu, "Med-prsimd: Enhanced complex disease risk prediction through integrative analysis of multi-type data and medical history records," in *Proceedings of the 15th ACM International Conference on Bioinformatics, Computational Biology and Health Informatics*, 2024, pp. 1–1.

2. **Xu, Yu**, Wang, Chonghao, Li, Zeming, Cai, Yunpeng, Young, Ouzhou, Lyu, Aiping, Zhang, Lu, "A machine learning model for disease risk prediction by integrating genetic and non-genetic factors," in *2022 IEEE International Conference on Bioinformatics and Biomedicine (BIBM)*, IEEE, 2022, pp. 868–871.

## Skills

Languages    ▌   Reading, writing, and speaking competencies for English (IELTS: 7.0), Mandarin Chinese, and Cantonese.

## Miscellaneous Experience

### Awards and Achievements

2020    ▌   **Merit Scholarship in MSc**, Hong Kong Baptist University.

2021    ▌   **Merit Scholarship in MSc**, Hong Kong Baptist University.