

Zibin Zhao

Bioengineering PhD student at HKUST. Research across molecular diagnostics, computational biology, and deep learning.

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Education

2022-present

Ph.D., Bioengineering

The Hong Kong University of Science and Technology

- HKPFS + Redbird Award (2022)
- Hsing Lab

2018-2020

B.S., Biomedical Engineering

University of Melbourne

- First Class Honours
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Experience

Co-founder & CEO

PealthMed Ltd

2021-2022

Research Assistant

The Hong Kong University of Science and Technology

- Wearable wireless real-time 12-lead ECG monitoring
- Filter bank + deep learning for heart-disease classification

2020-2021

Teaching Assistant

Shanghai Jiao Tong University

2018-2019

Laboratory Intern

Haihe Animal Science & Technology Co., Ltd.

Leadership

2020

President & Event Director

Chinese Music Group, University of Melbourne

Selected publications

2026 Nature Biotechnology

DNA-guided CRISPR-Cas12a effectors for programmable RNA recognition and cleavage

X Wu, WH Lam, **Z Zhao**, Y Cao, H Lin, X Feng, Y Zhai, IM Hsing

2026 Nature Communications, 17, 8376

Thermodynamically programmed one-pot CRISPR platform for point-of-care SNP genotyping

X Wu, Y Li, Y Cao, **Z Zhao**, H Lu, S Liang, GCY Lui, DPC Chan, IM Hsing

2025 Briefings in Bioinformatics, 26(6) First author

Structure-enhanced deep learning accelerates aptamer selection for small molecule families like steroids

Z Zhao, H Lin, HY Lau, H Chen, IM Hsing

Technical skills

Python C MATLAB LabVIEW SolidWorks Deep learning Molecular dynamics

Languages

Mandarin and Cantonese (native); English (professional proficiency).