Haoran SUN

EDUCATION

Sept. 2019–June 2023 (expected)

B.Sc., Bioinformacis, Chinese University of Hong Kong, Shenzhen (CUHK-Shenzhen). CGPA: 3.68 (3/35), MGPA: 3.80 (1/35)

SKILLS

Coding langs

Python, Fortran, CUDA C/Fortran (elementary)

Computer skills

Linux (including system configuration, multi-user management, and software installation), Git, ETFX

Scientific computing

Numpy, MATLAB

Programming tools

Vim, VSCode, Jupyter Lab

Compt. chem. tools

Gaussian, Amber, Gromacs

TEACHING EXPERIENCES

Sept. 2021-Dec. 2021

Undergraduate student teaching fellow (USTF), Computation Biology (BIM2005), CUHK-Shenzhen, 4 tutorial sessions.

- Tutorial session about how to use molecular docking tool Autodock-vina.
- Tutorial session to help the student review basic principles of quantum mechanics and quantum chemistry.
- Tutorial session about the mathematical background and hands-on python implementation of principal component decomposition (PCA) algorithm.

Jan. 2022–May 2022 (expected) **Undergraduate student teaching fellow (USTF)**, Organic Chemistry (BIO2003), CUHK-Shenzhen.

RESEARCH EXPERIENCES

Apr. 2021–May 2023 (expected)

Research assistant, Hajime HIRAO's research group, Warshel Institute for Computational Biology. Computational chemistry/biology, MD simulation, QM/MM

Jan. 2020-Apr. 2021

Research assistant, Hsien-da HUANG's research group, Warshel Institute for Computational Biology.

Multi-omics research, expression data analysis

RESEARCH INTERESTS

Computational chemistry/biology, development of free-energy calculation and TS-searching algorithms, statistical learning applied to computational chemistry/biology.

ACHIEVEMENTS AND HONORS

Sep. 2018

The First prize, Chinese Chemistry Olympiad, provincial level.

Sep. 2019–June 2023

Bowen Scholarship, 30,000 RMB/Year (total 120,000 RMB), CUHK-Shenzhen.

(expected)

Sep. 2020

Academic Year 2019-20 Dean's List Award, School of Science and Engineering, CUHK-Shenzhen.

Sep. 2021

Academic Year 2020-21 Dean's List Award, School of Life and Health Sciences, CUHK-Shenzhen.

Sep. 2021

The Second prize, Contemporary Undergraduate Mathematical Contest in Modeling, provincial level.

LANGUAGE SKILLS

Chinese (native), English (will have a TOEFL test in March), Japanese (elementary, only be able to read)