Yongqi Wang

Education

• Centrum Wiskunde & Informatica (CWI) PhD, Machine Learning, supervised by Prof. dr. Peter Grünwald Amsterdam, Netherlands

Dec 2024 - Present

• Eidgenössische Technische Hochschule Zürich (ETHz)

MSc, Computational Biology and Bioinformatics, supervised by Prof. dr. Sara van de Geer

Zürich, Switzerland Sep 2018 - Jun 2023¹

• The Hong Kong Polytechnic University (PolyU)

BSc (Hons), Applied Biology with Biotechnology, Minor in Applied Mathematics

Hong Kong, China Sep 2014 - May 2018

• The University of Waterloo (UWaterloo) Exchange

Waterloo, Canada

Jan 2017 - May 2017

Experience

• Master's Thesis at ETHz

Oct 2022 - Mar 2023

- Surveyed the approximation properties of two-layer neural networks (2NN)
- Characterized function spaces where 2NN is effective in approximation

• Lab Rotation at CoBi Oct 2020 - Dec 2020

- Adapted 2D cellular simulation framework (LBIBCell) for morphogen gradient detection
- Parameter screening for viable synthetic tissues on Euler cluster

 Lab Rotation at CoBi *Apr* 2020 - Jul 2020

- Benchmarked different 3D surface re-meshing algorithms for complex cellular structures
- Implemented Poisson disc surface sampling and re-meshing in C++(VTK)
- Lab Rotation at Bachlan Apr 2019 - Jul 2019
 - Built a benchmark framework (CongiBench) for cognitive models with SciUnitin Python
 - Added a CI/CD pipeline and distribution for the Python package

• Hong Kong Polytechnic University

Hong Kong, China

Feb 2018 - Jul 2018

Research Assistant @ Dr Ko Chi-bun, Ben

- Classified protein binding patterns in ChIP-seq data
- Identified differential binding events and potential gene targets

• China Agricultural University

Research Assistant @ Prof. Xun Suo

Beijing, China

Apr 2016 - Aug 2016

- Built and maintained an internal server for microarray analysis
- Versioned R/Bioconductor packages for common analysis workflows

Awards

Dean's List of Outstanding Students, Faculty of Applied Science and Textiles, PolyU

2017

• Work-Integrated Education Offshore Sponsorship, PolyU

2017

Wong Tit-shing Student Exchange Scholarship, PolyU

2017

Publications

Zhou, Yuanyuan, Zhongguo Zhou, Dessy Chan, Po yee Chung, Yongqi Wang, Albert Sun chi Chan, Simon Law, Kim hung Lam, and Johnny Cheuk On Tang. "The Anticancer Effect of a Novel Quinoline Derivative 91b1 through Downregulation of Lumican". International Journal of Molecular Sciences, vol. 23, no. 21, Jan. 2022, p. 13181. https://doi.org/10. 3390/ijms232113181.

Languages & Technical Skills

Mandarin (C2), Cantonese (C2), English (C2); Python, R, Shell, C++, LATEX, git

¹I suffered from a major accident, and subsequently 2 surgeries and rehabilitation in 2021 but fortunately, I have made a full recovery!