# 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 2023<sup>1</sup>

• 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)

Waterloo, Canada

Exchange

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, ETHz

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, ETHz

*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 Bachlab, Universität Zürich

Apr 2019 - Jul 2019

- Built a benchmark framework (CongiBench) for cognitive models with SciUnit in Python
- Added a CI/CD pipeline and distribution for the Python package
- Research Assistant at Prof. Ko Chi-bun, Ben 's lab, PolyU

Feb 2018 - Jul 2018

- Classified protein binding patterns in ChIP-seq data
- Identified differential binding events and potential gene targets
- Research Assistant at Prof. Xun Suo's lab, China Agricultural University

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

<sup>&</sup>lt;sup>1</sup>I suffered from a major accident, and subsequently 2 surgeries and rehabilitation in 2021 but fortunately, I have made a full recovery!