# 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

**Zürich, Switzerland** Sep 2018 - Jun 2023

• The Hong Kong Polytechnic University (PolyU)

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

Hong Kong, China Sep 2014 - May 2018

• The University of Waterloo (UWaterloo) Exchange

Waterloo, Canada Jan 2017 - May 2017

## Experience

• ETH Zürich Master's Thesis @ Prof. dr. Sara van de Geer Zürich, Switzerland

Oct 2022 - Mar 2023

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

• ETH Zürich Zürich, Switzerland
Lab Rotation @ CoBi Oct 2020 - Dec 2020

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

• ETH Zürich Zürich, Switzerland
Lab Rotation @ 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)

Universität Zürich, Switzerland
 Lab Rotation @ bachlab
 Apr 2019 - Jul 2019

- Built a benchmark framework for cognitive models with SciUnit in Python
- Added a CI/CD pipeline and distribution for the Python package

• Hong Kong Polytechnic University Research Assistant @ Dr Ko Chi-bun, Ben Hong Kong, China Feb 2018 - Jul 2018

- 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

#### **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.

#### Technical Skills

Python, R, Shell, C++, LATEX, git, Docker