

# Yongqi Wang

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## Education

- **Centrum Wiskunde & Informatica (CWI)** **Amsterdam, Netherlands**  
*PhD, Machine Learning, supervised by Prof. dr. Peter Grünwald*  
Dec 2024 - Present
- **Eidgenössische Technische Hochschule Zürich (ETH)** **Zürich, Switzerland**  
*MSc, Computational Biology and Bioinformatics, supervised by Prof. dr. Sara van de Geer*  
Sep 2018 - Jun 2023
- **The Hong Kong Polytechnic University (PolyU)** **Hong Kong, China**  
*BSc (Hons), Applied Biology with Biotechnology, Minor in Applied Mathematics*  
Sep 2014 - May 2018
- **The University of Waterloo** **Waterloo, Canada**  
*Exchange*  
Jan 2017 - May 2017

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## Research Experience

- **Master's Thesis** at ETH **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, ETH **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, ETH **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

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## Selected Awards and Honours

- Dean's List of Outstanding Students, Faculty of Applied Science and Textiles, **PolyU** **2017**
- Wong Tit-shing Student Exchange Scholarship, **PolyU** **2017**

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## 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 Down-regulation of *Lumican*". *International Journal of Molecular Sciences*, vol. 23, no. 21, Jan. 2022, p. 13181. <https://doi.org/10.3390/ijms232113181>.

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## Languages & Technical Skills

Mandarin (C2), Cantonese (C2), English (C2); Python, R, Shell, L<sup>A</sup>T<sub>E</sub>X, git, C++(novice)