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 (ETH) *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 Exchange Waterloo, Canada Jan 2017 - May 2017

Research Experience

• Master's Thesis at ETH, supervised by Prof. dr. Sara van de Geer

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

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

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.

Languages & Technical Skills

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