Yongqi Wang

Education

- **ETH Zürich** — **Zürich, Switzerland**
  MSc, Computational Biology and Bioinformatics — *Sep 2018 - Jun 2023*

- **The Hong Kong Polytechnic University** — **Hong Kong, China**
  BSc (Hons), Applied Biology with Biotechnology, Minor in Applied Mathematics — *Sep 2014 - May 2018*

- **The University of Waterloo** — **Waterloo, Canada**
  Exchange Program — *Jan 2017 - May 2017*

Experience

- **ETH Zürich** — **Zürich, Switzerland**
  Master's Thesis @ 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

- **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** — **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** — **Hong Kong, China**
  Research Assistant @ Dr Ko Chi-bun, Ben — *Feb 2018 - Jul 2018*
  - Classified protein binding patterns in ChIP-seq data
  - Identified differential binding events and potential gene targets

- **China Agricultural University** — **Beijing, China**
  Research Assistant @ Prof. Xun Suo — *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

Technical Skills

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