

Qingyang Yin

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Education

Department of Quantitative and Computational Biology, University of Southern California **Los Angeles, CA, USA**
Ph.D. Student in Computational Biology and Bioinformatics, GPA: 3.97/4.0 *Aug. 2021-present*

Additional: 5 computational classes taken from M.S. in Computer Science.

Berkeley Global Access Program, University of California, Berkeley **Berkeley, CA, USA**
Visiting Student, GPA: 4.0/4.0 *Aug. 2019-Dec. 2019*

Department of Automation, Xiamen University **Xiamen, Fujian, China**
B.E. in Automation, GPA: 90.85/100, Ranking: 1/81 *Sep. 2017-Jun. 2021*

Publications

- **Yin, Q.**, Chen, L. (2023). CellTICS: an explainable neural network for cell-type identification and interpretation based on single-cell RNA-seq data. *Briefings in Bioinformatics*, 25(1): bbab449.
- **Yin, Q.**, Wang, Y., Guan, J. & Ji, G. (2022). scIAE: an integrative autoencoder-based ensemble classification framework for single-cell RNA-seq data. *Briefings in Bioinformatics*, 23(1): bbab508.
- Guan, J., Wang, Y., Lin, Y., **Yin, Q.**, Zhuang, Y. & Ji, G. (2021). Cell type-specific predictive models perform prioritization of genes and gene sets associated with autism. *Frontiers in Genetics*, 11, 1778.

Research Interests

- High-throughput sequencing data analysis
- Biologically interpretable deep learning

Experience

Teaching assistant, University of Southern California *Jan. 2024-present*
● Holding weekly discussion sessions, holding office hours, and grading homework and exams for QBIO 305: Statistics for Biological Sciences

Research assistant, University of Southern California *Aug. 2022-present*
● Developed CellTICS, an explainable neural network for cell-type identification for single-cell RNA-seq data
● Working on analyzing cancer dependency data to identify cancer driver mutations and genes

Student supervisor, Xiamen University *Jul. 2020-Jun. 2021*
● Dealt with student affairs as a helper of full-time student supervisor.

Undergraduate researcher, Xiamen University *Feb. 2020-Jun. 2021*
● Developed scIAE, an integrative autoencoder-based ensemble classification framework for single-cell RNA-seq data

Skills

- **Programming:** Python, R, C/C++, MATLAB, SQL, TensorFlow, LaTeX, Linux
- **Language:** Chinese, English

Awards and Honors

- Outstanding graduate at Xiamen University (top 10%) *Jun. 2021*
- *Jixin-Engine* special scholarship (top 1%) *Apr. 2021*
- Meritorious winner of 2020 mathematical contest in modeling *Apr. 2020*
- Zhongxian Huang scholarship (top 5%) *Mar. 2020*
- First prize of Fujian province of contemporary undergraduate mathematical contest in modeling *Dec. 2019*
- National scholarship (top 2%) *Sep. 2018*