# Han Yuan

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#### **EDUCATION & ACADEMIC VISITINGS**

Aug.2020 – Jul. 2024 **Duke-NUS Medical School**, Singapore Ph.D. Degree in Biostatistics and Health Data Science Advisor: Dr. Nan Liu University of Zurich, Zurich, Switzerland Jan. 2022 - Jun. 2022 Research Scholar, Department of Quantitative Biomedicine Advisor: Dr. Michael Krauthammer Harvard University, Boston, United States Jul. 2019 - Jan. 2020 Research Scholar, Departments of Epidemiology and Biostatistics Advisor: Dr. Molin Wang Nankai University, Tianjin, China Sept. 2015 - Jun. 2019 Double B.S. Degrees in Bio-technology & Mathematics and Applied Mathematics Ranking: 1st/79, GPA: 3.7/4.0

#### **PUBLICATIONS & MANUSCRIPTS**

**Yuan, H.**, ... & Liu, N. (2022). AutoScore-Imbalance: An interpretable machine learning tool for development of clinical scores with rare events data. *Journal of Biomedical Informatics*.

Xie, F., Ning, Y., **Yuan, H.**, ... & Chakraborty, B. (2022). AutoScore-Survival: Developing interpretable machine learning-based time-to-event scores with right-censored survival data. *Journal of biomedical informatics*.

Xie, F., **Yuan**, **H.\***, ... & Liu, N. (2021). Deep learning for temporal data representation in electronic health records: A systematic review of challenges and methodologies. *Journal of biomedical informatics*.

Miao, C., Liang, C., Li, P., Liu, B., Qin, C., **Yuan, H.**, ... & Wang, Z. (2021). TRIM37 orchestrates renal cell carcinoma progression via histone H2A ubiquitination-dependent manner. *Journal of Experimental & Clinical Cancer Research*.

Xie, F., Ning, Y., **Yuan, H.**, ... & Liu, N. (2021). Package 'AutoScore': An Interpretable Machine Learning-Based Automatic Clinical Score Generator. *R Package*.

Zhao, Y.\*, Yuan, H.\* & Wu, Y. (2021). Prediction of Adverse Drug Reaction using Machine Learning and Deep Learning Based on an Imbalanced Electronic Medical Records Dataset. *International Conference on Medical and Health Informatics*. Zhang, J. J., Sun, Z., Yuan, H., & Wang, M. (2020). Alternatives to the Kaplan-Meier estimator of progression-free survival. *The International Journal of Biostatistics*.

Miao, C.\*, Yu, A.\*, Yuan, H.\*, Gu, M., & Wang, Z. (2020). Effect of Enhanced Recovery After Surgery on Postoperative Recovery and Quality of Life in Patients Undergoing Laparoscopic Partial Nephrectomy. *Frontiers in Oncology*.

### **HONORS & AWARDS**

Khoo Pre-Doctoral Fellowship, Duke-NUS Medical School	2020
Merit Graduates (Top 5% Graduates), Nankai University	2019
The Third Prize of Undergraduate Scientific Research (Top 20% Groups), Tianjin Municipal Education Commission	2018
The First Prize of Excellent Undergraduate Scholarship ( <b>Top 5% Students</b> ), <i>Nankai University</i> 2016 of	& 2017
Merit Student (Top 10% Students), Nankai University	2016

#### **COURSEWORK & SOFTWARE**

Computer Skills R, C++, Python, LaTex, Simio, Softberry, IGV, Gblocks, ProTest, etc.

Curriculum Highlights Mathematics and Statistics: Advanced (linear) Algebra, Mathematical Analysis, Biostatistics,

Bioinformatics, Ordinary Differential Equation, Data Mining

Biology: Neurobiology, Genetics, Molecular Biology, Cytobiology, Microbiology

#### **EXTRACURRICULAR ACTIVITIES**

Data Analyst Intern, Comprehensive Cancer Center Zurich, UNIVERSITY HOSPITAL ZURICH

Jan. – Jun. 2022

• Compared machine learning models in multiple medical text analyses

Data Analyst Intern, Channing Division of Network Medicine, BRIGHAM HEALTH Aug. – Dec. 2019

- Compared and selected statistical models on different projects (mainly longitudinal datasets)
- Debugged algorithm and simplified time and space complexity of algorithm's code on R

Data Analyst Intern, Division of Macroeconomic Research, FOUNDER SECURITIES

Aug. – Sept. 2017

 Conducted macro-economy and industry analysis by using R and Excel with records from Bloomberg and National Bureau of Statistics of several different countries like US Census Bureau

<sup>\*</sup> Equal contribution

• Finished 5+ draft of macroeconomic research reports and 10+ industrial data reviews

## President, Econ-China Association of Nankai University

Sept. 2016 - Jun. 2017

- Organized 15+ seminars on economics and invited 10+ professors, attracting 80% Club members
- Maintained interactions with alumni and companies like CICC to find internships for Club members

## Teaching Volunteer, Tianjin Yongji Primary School

Sept. 2015 - Jan. 2016

• Weekly guided 40+ pupils about math knowledge