# Yuting YE

Biostatistics at UC Berkeley

Evans 439, UC Berkeley

#### RESEARCH INTERESTS

- Machine Learning: Theory of Nonconvex Learning, Graph Neural Network, Multi-label Classification
- Statistics: Multiple Hypothesis Testing, Bayesian Model, Mixture Model, Non-parametric Statistics
- Computational Biology: Pharmacogenomics, Bioinformatics, Disease Diagnosis

#### EDUCATION

PhD: Biostatistics, UC Berkeley	Aug 2017 - Dec 2021
GPA: 4.00/4.00 (PhD Candidate) Advisers: Peter J. Bickel and Haiyan Huang Master: Biostatistics, UC Berkeley	Aug 2015 - May 2017
GPA: 4.00/4.00 Bachelor: Mathematical Sciences, Tsinghua University	Aug 2011 - July 2015
GPA: 3.86/4.00 (Rank 1st in the Division of Probability and Statistics) Honor: Excellent Graduate of Class 2015	
Work Experience	

Amazon Search, Applied Scientist Intern. Research on widget ranking with multi-<br/>objective learning.May - Nov 2020Alibaba Taobao, Software Engineer Intern. Develop algorithms that incorporate<br/>prior knowledge into graph embeddings.Nov 2018 - Feb 2019Microsoft Azure, Data Scientist Intern. Churn analysis on the customers of Azure<br/>Storage.May - Aug 2018

#### Honors

The <b>Genentech</b> Fellowship Award	2019-2020
The Mayhew & Helen Derryberry Fellowship	2018-2019
National Scholarship	2014-2015
Zheng ZongCheng Scholarship	2013-2014
Zheng GeRu Scholarship	2012-2013

#### Selected Works

#### Machine Learning

#### Publication

[1] Da Xu, **Yuting Ye**, Chuanwei Ruan, Evren Korpeoglu, Sushant Kumar, Kannan Achan, From Intervention to Domain Transportation: A Novel Perspective to Optimize Recommendation, accepted by ICLR, 2022.

[2] Da Xu, **Yuting Ye**, Chuanwei Ruan, Bo Yang, Towards Robust Off-policy Learning for Runtime Uncertainty, accepted by AAAI, 2022.

[3] Da Xu, **Yuting Ye**, Chuanwei Ruan, Understanding the role of importance weighting for deep learning, ICLR spotlight talk, 2021.

[4] Yuting Ye, Xuwu Wang, Kunyang Jia, Jingren Zhou, Yanghua Xiao, Hongxia Yang, Bayes EMbedding (BEM): Refining Representation by Integrating Knowledge Graphs and Behavior-specific Networks. In Proceedings of the 28th ACM International Conference on Information and Knowledge Management. ACM, 2019, pp. 679–688.

[5] Yuting Ye, Lihua Lei, Cheng Ju, HONES: A Fast and Tuning-free Homotopy Method For Online Newton Step. In Proceedings of the Twenty-First International Conference on Artificial Intelligence and Statistics (AISTATS-18), pages 2008–2017, 2018.

#### Statistics Publication

[1] Wenpin Tang, **Yuting Ye**, The existence of maximum likelihood estimator in high-dimensional generalized linear models. Electron. J. Statist. 14 (2020), no. 2, 4028–4053. doi:10.1214/20-EJS1766.

[2] Yuting Ye, Yin Xia, Lexin Li. Paired Test of Matrix Graphs and Brain Connectivity Analysis. Biostatistics, kxz037, 2019.

Preprint

[3] Yuting Ye, Christine Ho, Ci-Ren Jiang, Wayne Tai Lee, Haiyan Huang, Hierarchical multi-label classification with local precision rate, submitted to Journal of Machine Learning Research (JMLR).

[4] **Yuting Ye**, Peter J. Bickel, Non-parametric density estimation and inference under the U-shape constraint, with an application to the Gene Fishing method, manuscript.

[5] **Yuting Ye**, Lihua Lei, Michael I. Jordan, Bayesian Inference On Gaussian Graphical Models With Soft G-Wishart Distributions, manuscript.

#### **Computational Biology**

#### Publication

[1] Calvin Chi, **Yuting Ye**, Bin Chen, and Haiyan Huang, Bipartite graph-based approach for clustering of cell lines by gene expression-drug response associations, accepted by Bioinformatics.

[2] Zhiyue Hu, **Yuting Ye**, Newbury Patrick, Haiyan Huang, Bin Chen. AICM: A Genuine Framework Targeting Inconsistency Between Large Pharmacogenomics Datasets. In Proceedings of Pacific Symposium on Biocomputing (PSB), pp. 248-259. 2019.

[3] Miao Chang, Elliot K. Edmiston, Fay Y. Womer, Qian Zhou, Shengnan Wei, Xiaowei Jiang, Yifang Zhou, **Yuting Ye**, Haiyan Huang, Xi-Nian Zuo, Ke Xu, Yanqing Tang, Fei Wang. Spontaneous low-frequency fluctuations in the neural system for emotional perception in major psychiatric disorders: amplitude similarities and differences across frequency bands. Journal of psychiatry & neuroscience: JPN. 2019 Mar; 44(2):132.

[4] Miao Chang, Fay Y. Womer, Elliot K. Edmiston, Chuan Bai, Qian Zhou, Xiaowei Jiang, Shengnan Wei, Yange Wei, Yuting Ye, Haiyan Huang, Yong He, Ke Xu, Yanqing Tang, Fei Wang. Neurobiological Commonalities and Distinctions Among Three Major Psychiatric Diagnostic Categories: A Structural MRI Study. Schizophrenia Bulletin. 2017 Jun 13.

[5] Yuting Ye, Jingyi Jessica Li, NMFP: a non-negative matrix factorization based preselection method to increase accuracy of identifying mRNA isoforms from RNA-seq data. BMC Genomics 17, 11 (2016). Preprint

[6] Zoe Vernon, **Yuting Ye**, Bin Chen, Haiyan Huang, Reversal Correlation for drug discovery and biomarker identification, manuscript.

#### PRESENTATIONS

#### Conference & Forum

Association for the Advancement of Artificial Intelligence (AAAI), Virtual	02/2022
INFORMS Annual Meeting,, Virtual	10/2021
The International Conference on Learning Representations (ICLR), Virtual	05/2021
ISBD, Renmin University of China, Virtual	04/2021
Global Scientist Interdisciplinary Online Forum held by SUSTech, Virtual	01/2021
Conference on Information and Knowledge Management (CIKM), Beijing, China	11/2019
Artificial Intelligence and Statistics (AISTATS), Playa Blanca, Lanzarote, Canary Islands	04/2018
Joint Statistical Meetings (JSM), Chicago, IL, US	08/2016
Asia Pacific Bioinformatics Conference, San Francisco, CA, US	01/2016
Invited Talks	
JD AI Research, Mountain View, CA, US	11/2019
Baidu Research, Sunnyvale, CA, US	03/2019
Seminar Talks	
UC Berkeley, Biostatistics student seminar	11/2019
UC Berkeley, SGSA Student Seminar	04/2019
UC Berkeley, Biostatistics student seminar	02/2019

#### TEACHING EXPERIENCE

Teaching assistant, STAT 134: Concepts of Probability	Fall 2020, Fall 2019
Teaching assistant, STAT 230: Linear Models	Spring 2019, Spring 2017
Teaching assistant, STAT 201B: Introduction to Statistics at an Advanced Level	Fall 2017
Teaching assistant, STAT 135: Concepts of Statistics	Fall 2016
Teaching assistant, PH 142: Introduction to Probability and Statistics in Biology and	Fall 2015
Public Health	

## PROFESSIONAL SERVICES

### Referee

Artificial Intelligence and Statistics (AISTATS)	2022
WSDM 2022 Workshop on Decision Making for Modern Information Retrieval System (DM4IR)	2021
Journal of Machine Learning for Modeling and Computing (JMLMC)	2021
Machine Learning Journal (MLJ)	2021
The Canadian Journal of Statistics (CJS)	2020
Conference on Neural Information Processing Systems (NIPS)	2017
Intelligent Systems for Molecular Biology	2017