

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF COMPUTATIONAL MEDICINE AND BIOINFORMATICS
COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

Jieping Ye, Ph.D., associate professor of computational medicine and bioinformatics, with tenure, Department of Computational Medicine and Bioinformatics, Medical School, and associate professor of electrical engineering and computer science, without tenure, Department of Electrical Engineering and Computer Science, College of Engineering, is recommended for promotion to professor of computational medicine and bioinformatics, with tenure, Department of Computational Medicine and Bioinformatics, Medical School, and professor of electrical engineering and computer science, without tenure, Department of Electrical Engineering and Computer Science, College of Engineering.

Academic Degrees:

Ph.D.	2005	University of Minnesota
M.S.	1999	National University of Singapore
B.A	1997	Fudan University

Professional Record:

2016-Present	Vice President of Research, Didi Chuxing, Beijing, China
2015-Present	Associate Professor of Computational Medicine and Bioinformatics, University of Michigan
2015-Present	Associate Professor of Electrical Engineering and Computer Science, University of Michigan
2010-2014	Associate Professor of Computer Science and Engineering, Arizona State University
2005-2010	Assistant Professor of Computer Science and Engineering, Arizona State University

Summary of Evaluation:

Teaching: Dr. Ye has mentored learners at multiple levels, including masters and Ph.D. students and fellows. His mentees have continued to positions in industry and academia, including Google, Pinterest, Microsoft, Texas A&M University, and Michigan State University. He also has served on over 40 dissertation committees. Dr. Ye's group has developed the SLEP package for sparse learning, which is now used by the scientific community in various research including disease gene selection, stroke prediction, craniosynostosis classification, and Alzheimer's disease classification. The use of SLEP has increased substantially to approximately 5,000 active users of the SLE software from over 25 different countries. He frequently gives lectures introducing sparse learning basics and its biomedical applications to students/researchers in biomedical informatics.

Research: Dr. Ye's research focuses on developing and implementing novel machine learning algorithms for analyzing large-scale, high-dimensional, heterogeneous, incomplete and structured data. He is considered to be ranked as number six in artificial intelligence leaders in China by *Forbes Magazine*, China. In his current role as vice president of artificial intelligence and data science at DiDi Chuxing in Beijing, Dr. Ye supervises more than 1,100 scientists and engineers. He has been well-funded for his research from the National Science Foundation, the NIH, the Office of Naval Research, and through industry. Dr. Ye has published 86 peer-reviewed articles, and one book, and has presented his research by invitation on more than 40 occasions nationally and internationally.

Recent and Significant Publications:

Wang, J, Ye, J: Multi-Layer Feature Reduction for Tree Structured Group Lasso via Hierarchical Projection. *NIPS* 1279-1287, 2017.

Li Q, Qui S, Ji S, Thompson P, Ye J, Wang J: Parallel Lasso Screening for Big Data Optimization. *KDD*: 1705-1714, 2016.

Yang S, Sun Q, Shuiwang J, Wonka P, Davidson I, Ye J: Structural Graphical Lasso for Learning Mouse Brain Connectivity. *KDD*: 1385-1394, 2015.

Thompson P, ...Ye J: ENIGMA and the Individual: Predicting Factors that Affect the Brain in 35 countries Worldwide. *NeuroImage* 145(Pt B):389-408, 2015.

Wang J, Zhou J, Wonka P, Ye J: Lasso Screening Rules via Dual Polytope Projection. *Journal of Machine Learning Research* 16: 1063-1101, 2015.

Service: Dr. Ye served as the associate editor for *Computational Statistics and Data Analysis* from 2012-2015 and as the associate editor for *IEEE Transactions on Knowledge and Data Engineering* from 2013-2017. He is currently the action editor for *Data Mining and Knowledge Discovery*. Dr. Ye serves as an area chair of Neuro Information Processing Systems 2018 and the Association for the Advancement of Artificial Intelligence 2019. He is a core faculty member in the Michigan Institute for Data Science and serves on their management committee.

External Reviewers:

Reviewer A: "Jieping has published a very large number of excellent research papers in top-ranked journals, which is very impressive. Moreover, quite a number of his research papers has been nominated or awarded as Best Research Papers in the top conferences. This is exceptional! There are few researchers in computer science that can reach his publication record in productivity, technical depth, and coverage breadth!! In comparison with his peers, I would rank him among top-5 most productive and reputed researchers in the field of data mining. His google scholar citation is over 14000, with H-index of 64 and i-10 index of 182. This is very high in the field of data mining."

Reviewer B: "Dr. Ye has also been extensively participating in the scientific community activities. He is on various professional committees, including grant review panels and conferences, and serves as a reviewer for various journals in his field."

Reviewer C: "Jieping's research record and service to the community are both outstanding. He has developed so many novel data mining and machine learning algorithms in many areas, including dimensionality reduction, multi-label classification, multi-task, active learning, matrix completion, and sparse learning. Most of them were published in top tier conferences and journals including KDD, ICML, NIPS, IEEE TPAMI, JMLR, Bioinformatics, and NeuroImage."

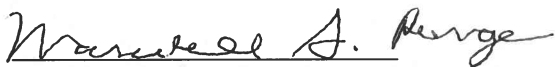
Reviewer D: "Jieping's group is also involved in the ENIGMA Center for Worldwide Medicine, Imaging & Genomics, which unites researchers worldwide from over 125 institutions to galvanize the neuroimaging and genetics communities and has performed the world's largest-ever neuroimaging studies."

Reviewer E: "In summary, Dr Ye's research accomplishments and professional record are outstanding. He has established an internationally recognized reputation, and has also been serving as the VP for research at Didi."

Reviewer F: "His research findings have profound impact on contemporary machine learning analysis, methods, and applications...The quality and quantity of Dr. Ye's work place him among the top machine-learning experts with expertise on bioinformatics and neuroimaging data analysis in his cohort."

Summary of Recommendations:

Dr. Ye is a globally recognized expert in machine learning, data mining, and big data analytics. His research output through publications and high impact abstracts is impressive. I am pleased, therefore, to recommend the promotion of Jieping Ye, Ph.D. to professor of computational medicine and bioinformatics, with tenure, Department of Computational Medicine and Bioinformatics, Medical School, and professor of electrical engineering and computer science, without tenure, Department of Electrical Engineering and Computer Science, College of Engineering.



Marschall S. Runge, M.D., Ph.D.
Executive Vice President for Medical Affairs
Dean, Medical School



Alec D. Gallimore, Ph.D.
Robert J. Vlasic Dean of Engineering
College of Engineering

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