

YUNXIAO CHEN: CURRICULUM VITAE

Address

Columbia House, Room 5.16
Houghton Street, London, WC2A 2AE

Email: y.chen186@lse.ac.uk

Website: <http://stats.lse.ac.uk/cheny185/>

Education

05/2016 Columbia University, New York, NY, USA Ph.D. in Statistics
 Advisors: Zhiliang Ying and Jingchen Liu
07/2011 Fudan University, Shanghai, China B.S. in Mathematics

Employment History

08/01/2023 - : Associate Professor (with tenure), Department of Statistics, London School of Economics and Political Science, London, UK
09/03/2018 - 07/31/2023: Assistant Professor (tenure-track), Department of Statistics, London School of Economics and Political Science, London, UK
07/13/2021 - : Affiliated member, Data Science Institute, London School of Economics and Political Science, London, UK
10/01/2018 - : Adjunct Professor, Department of Psychology, Emory University, Atlanta, GA, USA
08/24/2016 - 08/24/2018: Assistant Professor (tenure-track), Department of Psychology, Emory University, Atlanta, GA, USA
08/24/2016 - 08/24/2018: Assistant Professor, Institute for Quantitative Theory and Methods, Emory University, Atlanta, GA, USA
06/01/2014 - 07/25/2014: Intern (supervised by Dr. Matthias von Davier), Educational Testing Service, Princeton, NJ, USA

Primary Research Interests

Statistical analysis and computational algorithms for large-scale item response data

Statistical modeling and computational algorithms for dynamic behavioral data

Sequential design of dynamic systems, with applications to educational assessment and learning

Awards/Honors

Psychometrika Best Reviewer Award of the Annual Meeting of the Psychometric Society (IMPS), 2024

2022 Psychometrics Society Early Career Award

2020 AERA Outstanding Reviewer Award

NCME Brenda H. Lloyd Dissertation Award, National Council on Measurement in Education, 2018

Pearson Travel Award of Annual Meeting of the Psychometric Society (IMPS), 2015

Minghui Yu Teaching Assistant Award, Department of Statistics, Columbia University, 2014

Funding

IEA (International Association for the Evaluation of Educational Achievement) Research and Development Funds, 2022-2023

National Academy of Education/Spencer Postdoctoral Fellowship, 2018-2020

Books

1. Moustaki, I., Steele, F., **Chen, Y.**, and Bartholomew, D. (2025+) Analysis of Multivariate Social Science Data: Statistical Machine Learning Methods (3rd ed.). Oxfordshire, UK: Taylor & Francis.

Published Articles

1. **Chen, Y.**, Liu, J., and Ying, Z. (2015). Online Item Calibration for Q -matrix in CD-CAT. *Applied Psychological Measurement*, 39, 5-15.
2. **Chen, Y.**, Xu, G., Liu, J., and Ying, Z. (2015). Statistical Analysis of Q -matrix Based Diagnostic Classification Models. *Journal of the American Statistical Association*, 110, 850-866.

3. Sun, J., **Chen, Y.**, Liu, J., Ying, Z. and Tao, X. (2016). Latent Variable Selection for Multidimensional Item Response Theory Models via L_1 Regularization. *Psychometrika*, 81, 921-939.
4. **Chen, Y.**, Li, X., Liu, J. and Ying, Z. (2016). Regularized Latent Class Analysis with Application in Cognitive Diagnosis. *Psychometrika*, 82, 660-692.
5. **Chen, Y.**, Li, X., Liu, J., Xu, G. and Ying, Z. (2017). Exploratory Item Classification via Spectral Graph Clustering. *Applied Psychological Measurement*. 41, 579-599.
6. **Chen, Y.**, Li, X., Liu, J. and Ying, Z. (2018). Recommendation System for Adaptive Learning. *Applied Psychological Measurement*. 42, 24-41.
7. **Chen, Y.** and Chang, H-H. (2017). Psychometrics Help Learning: From Assessment to Learning (preface of special issue "Psychometrics Help Learning"). *Applied Psychological Measurement*. 42, 3-4.
8. Xu, H., Fang, G., **Chen, Y.**, Liu, J., Ying, Z. (2018). Latent Class Analysis of Recurrent Events in Problem-Solving Items. *Applied Psychological Measurement*. 42, 478-498.
9. **Chen, Y.**, Li, X., Liu, J. and Ying, Z. (2018). Robust Measurement via A Fused Latent and Graphical Item Response Theory Model. *Psychometrika*. 38, 538-562.
10. **Chen, Y.**, Liu, Y., Xu, S. (2018). Mutual Information Reliability for Latent Class Analysis. *Applied Psychological Measurement*. 46, 460-477.
11. **Chen, Y.**, Li, X., and Zhang, S. (2019). Joint Maximum Likelihood Estimation for High-dimensional Exploratory Item Response Analysis. *Psychometrika*. 84, 124-146.
12. Tang, X., **Chen, Y.**, Li, X., Liu, J. and Ying, Z. (2019). A Reinforcement Learning Approach to Personalized Learning Recommendation System. *British Journal of Mathematical and Statistical Psychology*. 72, 108-135.
13. **Chen, Y.**, Li, X., Liu, J. and Ying, Z. (2019). Statistical Analysis of Complex Problem-solving Process Data: From Prediction Perspective. *Frontiers in Psychology*. 10, 1-10.
14. **Chen, Y.** and Li, X. (2019). Exploratory Data Analysis for Cognitive Diagnosis: Stochastic Co-Blockmodel and Spectral Co-Clustering. In von Davier, M. and Lee, Y.-S., editors, *Handbook of Diagnostic Classification Models*. Springer, New York, NY.
15. Ayzenberg, S., **Chen, Y.**, Yousif, S.R. Lourenco, S.F. (2019) Skeletal Representations in Human Vision: Evidence for a Pruned Medial Axis of Shape. *Journal of Vision*. 19, 1-21.

16. Zhang, S., **Chen, Y.** and Liu, Y. (2020). An Improved Stochastic EM Algorithm for Large-Scale Full-information Item Factor Analysis. *British Journal of Mathematical and Statistical Psychology*. 73, 44-71.
17. **Chen, Y.** and Zhang, S. (2020). A Latent Gaussian Process Model for Analyzing Intensive Longitudinal Data. *British Journal of Mathematical and Statistical Psychology*. 73, 237-260.
18. Zhang, H., **Chen, Y.** and Li, X. (2020). A Note on Exploratory Item Factor Analysis by Singular Value Decomposition. *Psychometrika*. 85, 358-372.
19. **Chen, Y.**, Li, X., and Zhang, S. (2020). Structured Latent Factor Analysis for Large-scale Data: Identifiability, Estimability, and Their Implications. *Journal of the American Statistical Association*. 115, 1756-1770.
20. Li, X., **Chen, Y.**, Chen, X., Liu, J. and Ying, Z. (2021). Optimal Stopping and Worker Selection in Crowdsourcing: An Adaptive Sequential Probability Ratio Test Framework. *Statistica Sinica*. 31, 519-546.
21. **Chen, Y.**, Zhang, H., and Moustaki, I. (2020). A Note on Likelihood Ratio Tests for Models with Latent Variables. *Psychometrika*. 85, 996-1012.
22. **Chen, Y.** (2020). A Continuous-Time Dynamic Choice Measurement Model for Problem-Solving Process Data. *Psychometrika*. 85, 1052 - 1075.
23. **Chen, Y.**, Ying, Z. and Zhang, H. (2021). Unfolding-Model-Based Visualization: Theory, Method and Applications. *Journal of Machine Learning Research*. 22, 1-51.
24. **Chen, Y.** and Zhang, S. (2021). Estimation Methods for Item Factor Analysis: An Overview. In Zhao, Y. and Chen, D., editor, *Modern Statistical Methods for Health Research*. Springer, New York, NY.
25. Ravipati, K., **Chen, Y.**, and Manns, J. R. (2022) Reassessing Diabetes and APOE Genotype as Potential Interacting Risk Factors for Alzheimer’s Disease. *American Journal of Alzheimer’s Disease and Other Dementias*. doi:10.1177/15333175211070912
26. **Chen, Y.**, Lu, Y., and Moustaki, I. (2022). Detection of Two-way Outliers in Multivariate Data and Application to Cheating Detection in Educational Tests. *Annals of Applied Statistics*, 16, 1718-1746.
27. **Chen, Y.**, Lee, Y-H, and Li, X. (2022). Item Quality Control in Educational Testing: Change Point Model, Compound Risk, and Sequential Detection. *Journal of Educational and Behavioral Statistics*. 47, 322–352.

28. **Chen, Y.** and Li, X. (2022). Determining the Number of Factors in High-dimensional Generalised Latent Factor Models. *Biometrika*. 109, 769–782.
29. Zhang, S. and **Chen, Y.** (2022). Computation for Latent Variable Model Estimation: A Unified Stochastic Proximal Framework. *Psychometrika*. 87, 1473–1502.
30. Chen, X., **Chen, Y.** and Li, X. (2022). Asymptotically Optimal Sequential Design for Rank Aggregation. *Mathematics of Operations Research*. 47, 2310–2332
31. Lu, Z., **Chen, Y.** and Li, X. (2022). Optimal Parallel Sequential Change Detection under Generalized Performance Measures. *IEEE Transactions on Signal Processing*. 70, 5967–5981.
32. **Chen, Y.**, Moustaki, I. and Zhang, S. (2023). On the Estimation of Structural Equation Models with Latent Variables. In Hoyle, R., editor, *Handbook of Structural Equation Modeling* (2nd edition). Guilford Press, New York, NY.
33. **Chen, Y.** and Li, X. (2023). Compound Online Changepoint Detection in Parallel Data Streams. *Statistica Sinica*. 33, 453–474.
34. Liu, X., Wallin, G., **Chen, Y.** and Moustaki, I. (2023). Rotation to Sparse Loadings using L^p Losses and Related Inference Problems. *Psychometrika*. 88, 527–553.
35. **Chen, Y.**, Li, C., Ouyang, J. and Xu, G. (2023). Statistical Inference for Noisy Incomplete 1-Bit Matrix. *Journal of Machine Learning Research*. 24, 1–66.
36. **Chen, Y.**, Li, C., Ouyang, J. and Xu, G. (2023). DIF Statistical Inference without Knowing Anchoring Items. *Psychometrika*. 88, 1097 - 1122.
37. Wallin, G., **Chen, Y.** and Moustaki, I. (2024). DIF Analysis with Unknown Groups and Anchor Items. *Psychometrik*. 89, 267–295.
38. **Chen, Y.** and Li, X. (2024). A Note on Entrywise Consistency for Mixed-data Matrix Completion. *Journal of Machine Learning Research*. 25(343): 1–66.
39. Zhang, S. and **Chen, Y.** (2024). A Note on Ising Network Analysis with Missing Data. *Psychometrika*. 89, 1186–1202.
40. Xie, Z., **Chen, Y.**, von Davier, M., and Weng, H. (2024). Variable Selection in Latent Regression IRT Models via Knockoffs: An Application to International Large-scale Assessment in Education. *Journal of the Royal Statistical Society, Series A (Social Statistics)*. 187, 723–747.

41. Alfonzetti, G., Bellio, R., **Chen, Y.** and Moustaki, I. (2025). Pairwise Stochastic Approximation for Confirmatory Factor Analysis of Categorical Data. *British Journal of Mathematical and Statistical Psychology*. 78, 22-43.
42. **Chen, Y.**, Li, X., Liu, J. and Ying, Z. (2025). Item Response Theory – A Statistical Framework for Psychological Measurement (with discussions). *Statistical Science*. 40, 167–194.

Papers Accepted

1. Alfonzetti, G., Bellio, R., **Chen, Y.** and Moustaki, I. (2025+). When Composite Likelihood meets Stochastic Approximation. *Journal of American Statistical Association*. Accepted.
2. Cárdenas-Hurtado, C.A., Moustaki, I., **Chen, Y.** and Marra, G. (2025+). Generalized Latent Variable Models for Location, Scale, and Shape parameters. *Psychometrika*. Accepted.
3. Chen, F., **Chen, Y.**, Ying, Z. and Zhou, F. (2025+). Dynamic Factor Analysis of High-dimensional Recurrent Events. *Biometrika*. Accepted.
4. Qiao, J., **Chen, Y.** and Ying, Z. (2025+) Exact Exploratory Bi-factor Analysis: A Constraint-based Optimisation Approach. *Psychometrika*. Accepted.
5. Wallin, G., Chen, Y., Lee, Y-H, and Li, X., (2025+) A Latent Variable Model with Change Points and Its Application to Time Pressure Effects in Educational Assessment. *Annals of Applied Statistics*. Accepted.
6. Mignemi, G., **Chen, Y.**, and Moustaki, I. (2025+). Unfolding the Network of Peer Grades: A Latent Variable Approach. *Psychometrika (ARCS)*. Accepted.
7. Ma, T., Zhu, J. Cai, H., Qi, Z., **Chen, Y.**, Shi, C. and Laber, E. (2025+) Sequential Knockoffs for Variable Selection in Reinforcement Learning. *Journal of American Statistical Association*. Accepted.

Papers Submitted

1. Lee, S., **Chen, Y.** and Sit, T. (2025+) A Latent Variable Approach to Learning High-dimensional Multivariate Longitudinal Data. Submitted to *Journal of the American Statistical Association*. Revised and resubmitted (major revision).

2. Oka, M. **Chen, Y.**, and **Mounstaki, Y.** (2025+) Learning high-dimensional latent variable models via doubly stochastic optimisation by unadjusted Langevin. Submitted to *Journal of Educational and Behavioral Statistics*. Under revision (major revision).
3. Han, Y., Ji, F., **Chen, Y.**, Gan, K. and Liu, H. (2025+) Sequential Response Model with Covariates (SRM-C) for Assessing Differential Item Functioning in Process Data Analysis. Submitted to *Psychometrika*. Under review.
4. Lee, S.M. and **Chen, Y.** (2025+) Pairwise Comparisons without Stochastic Transitivity: Model, Theory and Applications. Submitted to *Journal of Machine Learning Research*. Under review.
5. Lee, S. **Chen, Y.** and Li. X. (2025+) Sequential Change Point Detection with FDR Control in Reconfigurable Sensor Networks. Submitted to *IEEE Transactions on Information Theory*. Revised and resubmitted (major revision).
6. Qiao, J., **Chen, Y.** and Ying, Z. (2025+) Exploratory Hierarchical Factor Analysis: A Divide-and-Conquer Approach with Theoretical Guarantees. Submitted to *Statistica Sinica*. Under revision (major revision).
7. Ouyang, J., **Chen, Y.**, Li, C., Xu, G. (2025+) Statistical Analysis of Large-scale Item Response Data under Measurement Non-invariance: A Statistically Consistent Method and Its Application to PISA 2022. Submitted to *Journal of American Statistical Association*. Under revision (major revision).
8. Zhang, S., **Chen, Y.**, Kuha, J. (2025+) A Latent Variable Framework for Multiple Imputation with Non-ignorable Missingness: Analyzing European Social Justice Perceptions. Submitted to *Journal of American Statistical Association*. Under review.
9. Zhang, H. and **Chen, Y.** (2025+) Rank Aggregation under Weak Stochastic Transitivity via a Maximum Score Estimator. Submitted to *Biometrika*. Under review.

Statistical Software

1. R package: lvmcomp (<https://cran.r-project.org/web/packages/lvmcomp/index.html>)
2. R package: mirtjml (<https://cran.r-project.org/web/packages/mirtjml/index.html>)
3. R package: mirtsvd (<https://cran.r-project.org/web/packages/mirtsvd/index.html>)

Talks and Conference Presentations

04/2014 Contributed talk, Minghui Yu Memorial Conference, Columbia University, New York, NY, USA

07/2014 Contributed talk, 79th Annual Meeting of the Psychometric Society, Madison, WI, USA

04/2015 Contributed talk, Minghui Yu Memorial Conference, Columbia University, New York, NY, USA

07/2015 Contributed talk, 80th Annual Meeting of the Psychometric Society, Beijing, China

03/2016 Invited talk, Conference on Statistical Network and High-Dimensional Data Analysis, Shanghai, China

07/2016 Invited talk, 81st Annual Meeting of the Psychometric Society, Asheville, NC, USA

08/2016 Invited talk, Fourth Conference on the Statistical Methods in Psychometrics, Columbia University, New York, NY, USA

10/2016 Contributed talk, Georgia Statistics Day Conference, Atlanta, GA, USA

12/2016 Invited talk, Fudan-Guanghua International Forum for Young Scholars, Shanghai, China

01/2017 Invited talk, Quantitative Brown Bag Series, School of Psychology, Georgia Tech, Atlanta, GA, USA

01/2017 Invited talk, Department of Mathematics and Statistics, Georgia State University, Atlanta, GA, USA

03/2017 Invited talk, Collaborative Innovation Center of Assessment toward Basic Education Quality, Beijing Normal University, Beijing, China

04/2017 Invited talk, Statistics Seminar, Georgia Tech ISyE, Atlanta, GA, USA

04/2017 Invited talk, Biostatistics Workshop - Statistical Inference for Biomedical Big Data, University of Florida, Gainesville, FL, USA

04/2017 Contributed talk, 2017 Annual Meeting of the National Council on Measurement in Education (NCME), San Antonio, TX, USA

07/2017 Invited talk, 82nd Annual Meeting of the Psychometric Society, Zurich, Switzerland

08/2017 Invited talk, 9th Annual Psychology Research Festival, Department of Psychology, Emory University, Atlanta, GA, USA

09/2017 Invited colloquium talk, Department of Applied and Computational Mathematics and Statistics, University of Notre Dame, South Bend, IN, USA

10/2017 Invited talk, Quantitative Brown Bag Series, School of Psychology, Georgia Tech, Atlanta, GA, USA

- 04/2018 Invited talk, 2018 Annual Meeting of the National Council on Measurement in Education (NCME), New York, NY, USA
- 05/2018 Invited talk, The 6th Workshop on Biostatistics and Bioinformatics, Georgia State University, Atlanta, GA, USA
- 07/2018 Contributed talk, 83th Annual Meeting of the Psychometric Society, New York, NY, USA
- 12/2018 Invited talk, 2018 International Conference on Data Science, Fudan University, Shanghai, China
- 01/2019 Invited seminar talk, the Social and Economic Data Science (SEDS) Seminar, London School of Economics, London, UK
- 05/2019 Invited seminar talk, Bristol Statistics Seminar, University of Bristol, Bristol, UK
- 05/2019 Invited talk, SEDS Annual Summit, London School of Economics, London, UK
- 06/2019 Invited talk, the international workshop on “Machine Learning and Data Science”, Columbia University, New York, NY, USA
- 07/2019 Invited talk, 84th Annual Meeting of the Psychometric Society, Santiago, Chile
- 12/2019 Invited talk, 2019 International Conference on Data Science, Fudan University, Shanghai, China
- 12/2019 Invited talk, LSE-SWUFE Joint Statistical Workshop, Southwestern University of Finance and Economics, Chengdu, China
- 12/2019 Invited talk, 11th ICSA International Conference, Zhejiang University, Hangzhou, China
- 02/2020 Invited seminar talk, Southampton Statistical Sciences Research Institute (S3RI) seminar series, University of Southampton, Southampton, UK
- 02/2020 Invited seminar talk, Queen Mary University of London, London, UK
- 10/2020 Invited talk for LSESU Data Science Society, LSE, London, UK
- 10/2020 Invited talk in the Graham Dunn (Virtual) Seminar, the University of Manchester, Manchester, UK
- 12/2020 Invited talk, ICSA 2020 Applied Statistics Symposium (Virtual), Houston, TX, USA
- 07/2021 Invited talk, Forum of Educational Statistics and Measurement, the Chinese Society of Education (Virtual), Beijing, China
- 09/2021 Invited talk, Royal Statistical Society International Conference, Manchester, UK

- 12/2021 Invited talk, Statistics seminar series (Virtual), Department of Mathematical Sciences, Durham University, UK
- 12/2021 Invited talk, SIG seminar series (Virtual), Educational Testing Service, Princeton, NJ, USA
- 03/2022 Invited talk, the University of Illinois at Urbana-Champaign Quantitative Brown-bag Seminar Series (Virtual), the University of Illinois at Urbana-Champaign, Urbana-Champaign, IL, USA
- 07/2022 Keynote talk, 2022 Annual Meeting of the Psychometric Society (IMPS), Bologna, Italy
- 11/2022 Invited talk, CRiSM Seminar, University of Warwick, Coventry, UK
- 12/2022 Invited talk, Statistics Seminar Series (Virtual), East China Normal University, Shanghai, China
- 06/2023 Invited talk, Statistics Seminar Series (Virtual), Hong Kong Polytechnic University, Hongkong, China
- 07/2023 Invited talk, 10th IEA International Research Conference, Dublin, Ireland
- 09/2023 Invited talk, CLAssification and Data Analysis Group (CLADAG) meeting, Salerno, Italy
- 09/2023 Invited talk, Psychometrics workshop, Columbia University, New York, NY
- 11/2023 Invited talk, Statistics Seminar Series, Institute of Systems Science, Academy of Mathematics and Systems Science, China
- 12/2024 Invited talk, Statistics Seminar, Department of Statistics, Fudan University, China
- 09/2025 Invited talk, 15-th Scientific Meeting of the Classification and Data Analysis Group, Naples, Italy
- 09/2025 Invited talk, Statistics Seminar, Department of Statistics, Computer Science, and Applications, University of Florence, Italy

Teaching

- 2023 Fall Applied Statistics Project (ST312), LSE
- 2023 Fall Statistical Modelling and Data Analysis (ST505), LSE
- 2023 Spring Statistical Models and Data Analysis (ST201), LSE
- 2023 Spring Multivariate Methods (ST405), LSE
- 2022 Fall Applied Statistics Project (ST312), LSE
- 2022 Fall Statistical Modelling and Data Analysis (ST505), LSE

2022 Spring	Statistical Models and Data Analysis (ST201), LSE
2022 Spring	Multivariate Methods (ST405), LSE
2021 Fall	Applied Statistics Project (ST312), LSE
2021 Fall	Statistical Modelling and Data Analysis (ST505), LSE
2021 Spring	Statistical Models and Data Analysis (ST201), LSE
2021 Spring	Multivariate Methods (ST405), LSE
2020-2021	Capstone Project (ST498), LSE
2020 Fall	Statistical Modelling and Data Analysis (ST505), LSE
2020 Spring	Multivariate Methods (ST405), LSE
2019-2020	Capstone Project (ST498), LSE
2019 Fall	Statistical Modelling and Data Analysis (ST505), LSE
2019 Summer	Statistical Methods for Multivariate Data in Social Science Research (ME303), LSE
2019 Spring	Multivariate Methods (ST405), LSE
2018 Spring	Generalized Linear Models (QTM385), Emory University
2018 Spring	Advanced Statistical Methods (PSYCH770), Emory University
2017 Fall	Statistical Learning (QTM385), Emory University
2017 Spring	Generalized Linear Models (QTM385), Emory University
2017 Spring	Advanced Statistical Methods (PSYCH770), Emory University
2016 Fall	Statistical Learning (QTM385), Emory University
2013 Summer	Introduction to Statistics (S1111), Columbia University

Ph.D. Students

Yuqing Xie	Department of Statistics, LSE	Current (co-advising with Prof. Irini Moustaki)
Yuxuan Xu	Department of Statistics, LSE	Current (co-advising with Prof. Irini Moustaki)
Motonori Oka	Department of Statistics, LSE	Current (co-advising with Prof. Irini Moustaki)
Sze Ming Lee	Department of Statistics, LSE	Graduated (co-advising with Prof. Irini Moustaki); LSE fellow
Xinyi Liu	Department of Statistics, LSE	Graduated (co-advising with Prof. Irini Moustaki)
Sahoko Ishida	Department of Statistics, LSE	Graduated (co-advising with Prof. Wicher P Bergsma) Postdoc Researcher at University of Bologna
Camilo Cardenas -Hurtado	Department of Statistics, LSE	Graduated (co-advising with Prof. Irini Moustaki); LSE Fellow
Giuseppe Alfonzetti	Department of Statistical Sciences, University of Padua	Graduated (co-advising with Dr. Ruggero Bellio, and Prof. Irini Moustaki); Postdoc Researcher at University of Udine
Yan Lu	Department of Statistics, LSE	Graduated (co-advising with Prof. Irini Moustaki)

Postdoctoral Researchers

Dr. Gabriel Wallin	Department of Statistics, LSE	Lecturer at Lancaster University
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Ph.D. Examination

Ling Chen	2025	Columbia University
Toby Wade	2024	London School of Economics and Political Science
Shuhan Yang	2024	London School of Economics and Political Science
Maoxin Zhang	2023	University of Oslo
Kaifang Zhou	2023	London School of Economics and Political Science
Patrick Aschermayr	2023	London School of Economics and Political Science
Chengcheng Li	2022	University of Michigan

Professional and Editorial Work

Editorial Council Member of the Psychometric Society [2024 - 2030]

Guest editor of Journal of Intelligence special issue “Psychometric Methods: Theory and Practice”

Associate editor of Journal of Educational and Behavioural Statistics [2025 -]

Associate editor of Psychological Methods [2025 -]

Associate editor of British Journal of Mathematical and Statistical Psychology [2022 -]

Associate editor of Psychometrika [2019 -]

Editorial board member of Journal of Educational and Behavioural Statistics [2021 - 2025]

Editorial board member of Applied Psychological Measurement [2017 -]

Guest Editor of Applied Psychological Measurement special issue “Psychometrics Help Learning”

Grant proposal reviewer for the United States National Science Foundation

Grant proposal reviewer for the Spencer Foundation

Grant proposal reviewer for the Research Grants Council of Hong Kong

Screening reviewer and reviewer of Statistica Sinica

Reviewer of Journal of the American Statistical Association

Reviewer of Biometrika

Reviewer of Psychometrika

Reviewer of British Journal of Mathematical and Statistical Psychology

Reviewer of Journal of Educational and Behavioral Statistics

Reviewer of Psychological Methods

Reviewer of Structural Equation Modeling

Reviewer of Stat

Reviewer of Large-scale Assessments in Education

Reviewer of PLOS ONE

Reviewer of BioData Mining

Reviewer of Journal of Intelligence

Reviewer of Multivariate Behavioral Research

Reviewer of Journal of Machine Learning Research

Reviewer of Statistics and Probability Letters

Reviewer of Assessment in Education: Principles, Policy & Practice

Reviewer of Educational Assessment

Reviewer of Journal of Computational and Graphical Statistics

Reviewer of Journal of Statistical Computation and Simulation

Reviewer of Behavior Research Methods

Reviewer of Journal of Business & Economic Statistics

Reviewer of Annals of Statistics

Reviewer of Journal of Mathematical Psychology

Reviewer of IEEE Information Theory

Reviewer of Journal of the Royal Statistical Society, Series A (Statistics in Society)

Reviewer of Educational Measurement

Reviewer of Statistical Science
Reviewer of Nature Humanities and Social Sciences Communications
Reviewer of Journal of the Royal Statistical Society, Series B (Statistical Methodology)
Reviewer of Behaviormetrika
Reviewer of Journal of Research on Educational Effectiveness
Reviewer of Journal of Econometrics
Reviewer of Statistics and Public Policy

Professional Memberships and Service

Member of Psychometric Society
Member of American Statistical Association
Member of Institute of Mathematical Statistics
Member of International Chinese Statistical Association
Member of Eastern North American Region International Biometric Society
Member of National Council on Measurement in Education
Member of IEEE
Liaison Officer of Mental Health Statistics Section, American Statistical Association

Conference and Seminar Organizers

07/2023	Member, Program Committee of the 2023 international meeting of psychometric society (IMPS), Maryland, USA
07/2022	Member, Program Committee of the 2022 international meeting of psychometric society (IMPS), Bologna, Italy
2018-2021	Co-organizer, Joint Statistics and Econometrics Seminar Series, LSE, London, UK
05/2020	Member, Scientific Program Committee of International Chinese Statistical Association Applied Symposium, Houston, TX, USA
07/2018	Co-organizer, Conference on Statistical Methods for Innovative Testing and Learning, New York, NY, USA
06/2018	Co-organizer, Workshop on Statistical Methods for Educational Testing and Learning, Shanghai, China

- 08/2016 Co-organizer, Fourth Conference on the Statistical Methods in Psychometrics, New York, NY, USA
- 07/2016 Member, Organizing Committee of ICOSA Conference on Data Science, Dali, China
- 06/2016 Member, Program Book Committee of International Chinese Statistical Association Applied Symposium, Atlanta, GA, USA
- 11/2015 Co-organizer, International Conference on Applied Probability and Computational Methods in Applied Sciences, Shanghai, China
- 06/2015 Co-organizer, Fifth International Workshop in Sequential Methodologies, New York, NY, USA
- 2014-2015 Co-chair, Student Seminar of Department of Statistics, Columbia University, New York, NY, USA
- 05/2014 Co-organizer, Third Workshop on Statistical Methods in Cognitive Assessments, Shanghai, China
- 05/2013 Co-organizer, Second Workshop on Statistical Methods in Cognitive Assessments, New York, NY, USA

Administrative Experience

Programme director of MSc Health Data Science, Department of Statistics, London School of Economics and Political Science, 2023 -

Departmental teaching committee member, Department of Statistics, London School of Economics and Political Science, 2023-

Departmental research committee member, Department of Statistics, London School of Economics and Political Science, 2022-

Organiser for the MSc Cumberland Lodge trip, Department of Statistics, London School of Economics and Political Science, 2022 -

Departmental EDI committee member, Department of Statistics, London School of Economics and Political Science, 2020-

Programme director of MSc Statistics, Department of Statistics, London School of Economics and Political Science, 2021-2022

BSc MSB and Data Science admissions, Department of Statistics, London School of Economics and Political Science, 2020-2021

Member of Working Group for Online Teaching and Assessment, Department of Statistics, London School of Economics and Political Science, 2020

Member of BSc Maths, Stats and Business (MSB) Evaluation Committee, Department of Statistics, London School of Economics and Political Science, 2020

Member of Working Group for Joint Health Policy and Statistics MSc Programme, Department of Statistics, London School of Economics and Political Science, 2019

Member of Working Group for PhD Restructuring, Department of Statistics, London School of Economics and Political Science, 2019

Member of Emory College Committee on Academic Standards, Emory University, 2017

Member of Quantitative Training Committee, Department of Psychology, Emory University, 2016-2017

Member of Information Technology and Webpage Committee, Department of Psychology, Emory University, 2016-2017

Member of Emory College Honor Council Committee, Emory University, 2016-2017