MINJEONG JEON

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3141 Moore Hall, University of California, Los Angeles, CA 90095

EDUCATION

Ph.D. in Quantitative Methods and Evaluation *2007-2012*
University of California, Berkeley (UC Berkeley), Graduate School of Education

M.A. in Statistics *2007-2011*
University of California, Berkeley, Department of Statistics

M.A. in Quantitative Methods, Measurement and Evaluation *2003-2005*
Yonsei University, Graduate School of Education, Korea

B.A. in Education, Department of Education (High honor) *1999-2003*
Yonsei University, Korea

B.A. in Sociology, Department of Sociology (High honor) *1999-2003*
Yonsei University, Korea

EMPLOYMENT/POSITIONS

University of California, Los Angeles *2019-Present*
Associate Professor, Advanced Quantitative Methods, Department of Education

University of California, Los Angeles *2016-Present*
Affiliated Faculty, Center for Social Statistics at UCLA

University of California, Los Angeles *2016-2019*
Assistant Professor, Advanced Quantitative Methods, Department of Education

Yonsei University, Korea *2017 (June-Aug)*
Visiting Scholar, Department of Psychology

The Ohio State University (OSU) *2013-2016*
Assistant Professor, Quantitative Psychology, Department of Psychology
Affiliated Faculty, Translational Data Analytics @ Ohio State

Catholic University Leuven (KU Leuven), Belgium *2014 (June-Aug)*
Visiting Scholar, Quantitative Psychology, Department of Psychology

UC Berkeley/Educational Testing Service (ETS) *2012-2013*
Postdoctoral researcher

ETS *2009-2011*
Summer intern, Two positions (2009, 2011)
Statistical Consultant, One position (2010, July-August)

CTB/McGraw-Hill *2009*
Summer intern

Korean Educational Development Institute *2004-2005, 2006-2007*
Research scientist

HONORS AND AWARDS

Early Career Award, American Educational Research Association *2018*
Emerging scholar in educational measurement, psychometrics, and assessment (Division D). Awarded every 3 years.

Future Female Leader Award, Yonsei University *2018*
Selected as one of 100 Yonsei female leaders with outstanding achievements. Awarded every 10 years.

Jason Millman Award, National Council on Measurement in Education *2017*
Most promising early career measurement scholar award

Early Career Achievement Award, American Psychological Association *2016*
Outstanding contribution to psychology for early career scholars

Brenda Loyd Dissertation Award, National Council on Measurement in Education *2014*
Outstanding dissertation in the field of educational measurement

Harold Gulliksen Psychometric Research Fellowship, ETS *2011-2012*
Competitive year long dissertation fellowship awarded to outstanding dissertation project

Dean's Normative Time Fellowship, UC Berkeley *2011*
One year fellowship for advancement to candidacy within normative time (6 semesters)

The Berkeley Fellowship, UC Berkeley *2007-2012*
Most competitive five-year full fellowship for graduate students at UC Berkeley

First place, Twenty-fourth national scientific paper competition for graduate students *2006*
Korean National Statistical Office

First place, First national scientific paper competition using educational data *2005*
Korean Educational Development Institute

Winner, Forty-first graduate student paper competition *2005*
Graduate Students' Association, Yonsei University

Teacher Certificate in middle- and high-school General Sociology *2003*
Ministry of Education & Human Resources, Korea

Academic Scholarship, Graduate School of Education, Yonsei University *2003-2005*
Full scholarship for academic excellence

Academic Scholarship, Yonsei University *1999-2003*
Four-year scholarship for academic excellence

EDITORSHIP

Associate Editor, Psychometrika *2019-Present*

Associate Editor, Journal of Educational and Behavioral Statistics *2019-Present*

Editorial Board, Journal of Educational Measurement *2018-Present*

Book Review Editor, Journal of Educational and Behavioral Statistics *2015-2019*

Invited Guest Editor (with Drs. Lihshing Leigh Wang and Lale Khorramdel), British Journal of Mathematical and Statistical Psychology *2018*

PUBLICATIONS

Journal Papers

- Khorramdel, L., **Jeon, M.**, & Wang, L. (accepted). Advances in modeling response styles and related phenomena. *British Journal of Mathematical and Statistical Psychology.*
- De Boeck, P., Gore, R., & **Jeon, M.** (accepted). Commentary: Beyond registration pre and post. *Computational Brain & Behavior.*
- Rocca, C., Wilson, M., **Jeon, M.**, & Foster, D. G. (in press). Stability of retrospective pregnancy intention reporting among women with unwanted pregnancies in the United States. *Maternal and Child Health Journal.*
- **Jeon, M.** & De Boeck, P. (in press). Evaluation on types of invariance in studying extreme response bias with an IRTree approach. *British Journal of Mathematical and Statistical Psychology.*
- **Jeon, M.**, Draney, K., Wilson, M., & Sun, Y.* (in press). Investigation of adolescents' developmental stages in deductive reasoning: An application of a specialized mixture IRT approach. *Behavior Research Methods.*
- **Jeon, M.** (in press). Specialized confirmatory mixture IRT modeling for multidimensional tests. *Psychological Test and Assessment Modeling.*
- De Boeck & **Jeon, M.** (in press). An overview of models for response times and processes in cognitive tests. *Frontiers in Applied Mathematics and Statistics.*
- Lukowski, S.*, DiTrapani, J.*, Rockwood, N.*, **Jeon, M.**, Thompson, L. A. & Petrill, S. (in press). Etiological distinction across dimensions of math anxiety. *Behavior Genetics.*
- Montaya, A.* & **Jeon, M.** (in press). MIMIC DIF models as moderated mediation models. *Applied Psychological Measurement.*
- Rockwood, N.* & **Jeon, M.** (in press). Estimating complex measurement and growth models using the R package PLmixed. *Multivariate Behavioral Research.*
- Jin, I-H. & **Jeon, M.** (2018). [co-first-authors] A doubly latent space joint model for the analysis of item response data. *Psychometrika.* doi:10.1007/s11336-018-9630-0
- **Jeon, M.**, Rijmen, F., & Rabe-Hesketh, S. (2018). CFA models with a general factor and multiple sets of secondary factors. *Psychometrika.* doi:10.1007/s11336-018-9633-x
- **Jeon, M.** & De Boeck, P. (2018). An analysis of an item response strategy based on knowledge retrieval. *Behavior Research Methods.* doi:10.3758/s13428-018-1064-1
- Hughes, M. L., Agrigoroaei, S., **Jeon, M.**, Bruzzese, M. & Lachman, M. E. (2018). Change in cognitive performance from midlife into old age: Findings from the midlife in the United States (MIDUS) study. *Journal of the International Neuropsychological Society.* doi: 10.1017/S1355617718000425
- De Boeck, P. & **Jeon, M.** (2018). Perceived crisis and reforms: Issues, explanations, and remedies. *Psychological Bulletin*, 144, 757-777.
- **Jeon, M.** (2018). A constrained confirmatory mixture IRT model: Extensions and estimation of the Saltus model using Mplus. *The Quantitative Methods for Psychology*, 14, 120-136.
- DiTrapani, J.*, Rockwood, N.* & **Jeon, M.** (2018). Explanatory IRT analysis using the SPIRIT macro in SPSS. *The Quantitative Methods for Psychology, 14*, 81-98.
- Yoon, H-I., **Jeon, M.**, Kim, H-R., Jeong, Y-H., Kim, D-G. & Han, J-S. (2018). Spatial variation of bone biomechanical properties around a dental implant using nanoindentation: A case study. *Journal of the Mechanical Behavior of Biomedical Materials*, 79, 168-172.
- Thorn, B. E., Eyer, J. C. Van Dyke, B. P. Torres, C. A. Burns, J. W., Kim, M., Newman, A. K., Campbell, L. C., Anderson, B., Block, P. R., Bobrow, B. J., Faha, F., Brooks, R., Burton, T. T., Cheavens, J. S., DeMonte, C. M., DeMonte, W. D., Edwards, C. S., **Jeon, M.** , Mulla, M., Penn,

T., Smith, L. J., Tucker, D. (2018). Literacy-adapted cognitive-behavioral therapy vs. education for chronic pain at low-income clinics: A randomized controlled trial. *Annals of Internal Medicine*. doi:10.7326/M17-0972.

- **Jeon, M.**, Kaufman, C. & Rabe-Hesketh, S. (2018). Monte Carlo local likelihood approximation. *Biostatistics*. doi:10.1093/biostatistics/kxx070.
- Tijmstra, J., Bolsinova, M. A., & **Jeon, M.** (2018). Generalized mixture IRT models with different item-response structures: A case study using Likert-scale data. *Behavior Research Methods*. doi:10.3758/s13428-017-0997-0.
- Benjamin, D. J., Berger, J. O., Johannesson, M., Nosek, B. A., Wagenmakers, E.-J., Berk, R., Bollen, K. A., Brembs, B., Brown, L., Camerer, C., Cesarini, D., Chambers, C. D., Clyde, M., Cook, T. D., De Boeck, P., Dienes, Z., Dreber, A., Easwaran, K., Efferson, C., Fehr, E., Fidler, F., Field, A. P., Forster, M., George, E. I., Gonzalez, R., Goodman, S., Green, E., Green, D. P., Greenwald, A., Hadfield, J. D., Hedges, L. V., Held, L., Ho, T.–H., Hoijtink, H., Jones, J. H., Hruschka, D. J., Imai, K., Imbens, G., Ioannidis, J. P. A., **Jeon, M.**, Kirchler, M., Laibson, D., List, J., Little, R., Lupia, A., Machery, E., Maxwell, S. E., McCarthy, M., Moore, D., Morgan, S. L., Munafo M., Nakagawa, S., Nyhan, B., Parker, T. H., Pericchi, L., Perugini, M., Rouder, J., Rousseau, J., Savalei, V., Schobrodt, F. D., Sellke, T., Sinclair, B., Tingley, D., Van Zandt, T., Vazire, S., Watts, D. J., Winship, C., Wolpert, R. L., Xie, Y., Young, C., Zinman, J., & Johnson, V. E. (2018). Redefine Statistical Significance. *Nature Human Behavior*, 2, 6-10.
- Irons, J. L., **Jeon, M.** & Leber, A. B. (2017). Pre-stimulus pupil dilation and the preparatory control of attention. *PLoS ONE*. doi:10.1371/journal.pone.0188787.
- **Jeon, M.** & Rockwood, N.* (2017). [Software announcement] PLmixed: An R package for generalized linear mixed models with factors structures. *Applied Psychological Measurement*. 42, 401-402.
- DiTrapani, J.*, Rockwood, N.* & **Jeon, M.** (2017). [Software announcement] IRT analysis using the SPIRIT macro in SPSS. *Applied Psychological Measurement*, 42, 173 - 174.
- **Jeon, M.** & De Boeck, P. (2017). Decision qualities of Bayes factor and p-value based hypothesis testing. *Psychological Methods*, 22, 340-360.
- **Jeon, M.**, Rijmen, F. & Rabe-Hesketh, S. (2017). A variational maximization-maximization algorithm for generalized linear mixed models with crossed random effects. *Psychometrika*, 82, 693-716.
- **Jeon, M.**, De Boeck, P. & van der Linden, W.J. (2017). Modeling answer change behavior: An application of a generalized item response tree model. *Journal of Educational and Behavioral Statistics*, 42, 467-490.
- Fields, H. W., Kim, D-G., **Jeon, M.**, Firestone, A. R., Sun. Z., Shanker, S., Mercado, A. M., Deguchi, T., & Vig, K. W. L. (2017). Evaluation of objective structured clinical examination for advanced orthodontic education 12 years after introduction. *American Journal of Orthodontics and Dentofacial Orthopedics*, 151, 840-850. (****Selected as the best paper of the year by the OSU College of Dentistry.**)
- Lukowski, S. L.*, DiTrapani, J.*, **Jeon, M.**, Wang, Z.*, Schenker, V. J., Doran, M. M., Hart, S. A., Mazzocc, M., Willcutt, E. G., Thompson, L. A., & Petrill, S. A. (2016). Multidimensionality in the measurement of math-specific anxiety and its relationship with mathematical skills. *Learning and Individual Differences*. doi:10.1016/j.lindif.2016.07.007.
- Bishop, B.* & **Jeon, M.** (2016). [Book review] A review of missing data analysis in practice. *Psychometrika*, 81, 1164-1167.
- **Jeon, M.** & De Boeck, P. (2016). A generalized item response tree model for psychological assessments. *Behavior Research Methods*, 48, 1070-1085.

- **Jeon, M.** & Rabe-Hesketh, S. (2016). An autoregressive growth model for longitudinal item analysis. *Psychometrika*, 81, 830-850
- **Jeon, M.** & Rijmen, F. (2016). A modular approach for item response theory modeling with the R package FLIRT. *Behavior Research Methods*, 48, 742-755.
- Koch, T., Schultze, M., **Jeon, M.**, Nussbeck, F., Praetorius, A-K. & Eid, M. (2016). A cross-classified CFA-MTMM model for structurally different and non-independent interchangeable methods. *Multivariate Behavioral Research*, 51, 67-85.
- DiTrapani, J.*, **Jeon, M.**, De Boeck, P., & Partchev, I. (2016). Attempting to differentiate fast and slow intelligence: Using generalized item response trees to examine the role of speed on intelligence tests. *Intelligence*, 56, 82-92.
- **Jeon, M.** (2015). Differential response speed: Is it really a nuisance? *Measurement: Interdisciplinary Research and Perspectives*, 13, 169-172.
- Ray, T. Y, McGraw, S., Sun, Z., **Jeon, M.**, Johnson, T., Cheffins, K., Daegling, D., & Kim, D-G. (2015). Mandibular bone mineral density variation in sympatric cercopithecoids: Associations with diet and feeding behavior. *Archives of Oral Biology*, 60, 1714-1720.
- Rijmen, F., **Jeon, M.**, Rabe-Hesketh, S. & von Davier, M. (2014). A third order item response theory model for modeling the effects of domains and subdomains in large-scale educational assessment surveys. *Journal of Educational and Behavioral Statistics*. 39, 235-256.
- **Jeon, M.** & Rijmen, F. (2014). Recent developments in maximum likelihood estimation of MTMM models for categorical data. *Frontiers in Psychology*, 5, article 269.
- **Jeon, M.**, Rijmen, F. & Rabe-Hesketh, S. (2014). [Software announcement] Flexible item response theory modeling with ***flirt***. *Applied Psychological Measurement*. 38, 404-405.
- **Jeon, M.**, Rijmen, F. & Rabe-Hesketh, S. (2013). Modeling differential item functioning using a generalization of the multiple-group bifactor model. *Journal of Educational and Behavioral Statistics*, 38, 32-60.
- Rijmen, F. & **Jeon, M.** (2013). Fitting an item response theory model with random item effects across groups by a variational approximation method. *The Annals of Operations Research*, 206, 647-662.
- **Jeon, M.** & Rabe-Hesketh, S. (2012). Profile-likelihood approach for estimating generalized linear mixed models with factor structures. *Journal of Educational and Behavioral Statistics*, 37, 518-542.
- van der Linden, W.J. & **Jeon, M.** (2012). Modeling answer changes on test items. *Journal of Educational and Behavioral Statistics*, 37, 180-199.
- van der Linden, W.J., **Jeon, M.**, & Ferrara, S. (2011). A paradox in the study of the benefits of test-item review. *Journal of Educational Measurement*, 48, 380-398.
- Draney, K. & **Jeon, M.** (2011). Investigating the Saltus model as a tool for setting standards. *Psychological Testing and Assessment Modeling*, 53, 486-498.
- **Jeon, M.**, Lee, G., Hwang, J.W., & Kang, S.J. (2009). Estimating reliability of school-level scores using multilevel and generalizability theory models. *Asia Pacific Education Review*, 10, 149-158.
- Lee, G., Park, I.Y., & **Jeon, M.** (2009). Testlet response models for item response theory true score equating. *Korean Journal of Educational Evaluation*, 22, 871-887.
- Lee, G., Park, D.S., Nam, M., Kim, M., & **Jeon, M.** (2009). Cheating proof testing system (CPTS) and its validity. *Korean Journal of Educational Evaluation*, 22, 265-290.
- Kim, Y., Rye, H., Namgung, J., Kim, I., & **Jeon, M.** (2007). Development of school education satisfaction survey instruments for students and parents. *Korean Journal of Educational Evaluation*, 20, 1-27.

- Kang, S.J. & **Jeon, M.** (2006). Cross-level interaction effects between the high school equalization policy and peer relationships on high school students' self-esteem. *Journal of Korean Education*, 33, 121-140.
- Kang, S.J. & **Jeon, M.** (2006). Differences between the high school equalization and non-equalization regions: structural relationships between self-esteem, family income, and academic achievements. *Korean Journal of Educational Research*, 44, 195-221.
- **Jeon, M.** & Kang, S.J. (2005). A comparison of multilevel models in parameter estimation: two- and three-level nested and cross-classified models. *Korean Journal of Educational Evaluation*, 18, 123-147.

Book Chapters

- Rijmen, F., **Jeon, M.**, & Rabe-Hesketh, S. (2016). Variational approximation methods for IRT, In W.J. van der Linden & R. K. Hambleton (Eds). *Handbook of Modern Item Response Theory (2nd ed.), volume 2*, (pp. 259-270). New York, NY: Chapman & Hall.
- **Jeon, M.**, Draney, K., & Wilson, M. (2014). Multidimensional Saltus linear logistic test model for modeling children's cognitive development. In Millsap, R.E., Bolt, D.M., van der Ark, L.A., & Wang, W.-C. (Eds). *Quantitative Psychology Research: Proceedings of the 78th Annual Meeting of the Psychometric Society*, (pp.73-90). Springer.
- Rijmen, F., **Jeon, M.**, von Davier, M. & Rabe-Hesketh, S. (2014). A general psychometric approach for educational survey assessments: Flexible statistical models and efficient estimation methods. In Rutkowski, D., von Davier, M. & Rutkowski, D. (Eds). *A Handbook of International Large-Scale Assessment: Background, Technical Issues, and Methods of Data Analysis*, (pp. 583-606). London: Chapman Hall/CRC Press.

Other Publications

- Rockwood, N.*, DiTrapani, J.* & **Jeon, M.** (2017). User guide for the SPSS macro SPIRIT.
- Rockwood, N.* & **Jeon, M.** (2017). R package PLmixed vignette.
- **Jeon, M.** (2014). User Manual for the R package FLIRT.
- **Jeon, M.** (2012). Eight Frequently Asked Questions (FAQs) on the GLLAMM website. http://www.gllamm.org/faqs/faqs.html
- **Jeon, M.** (2011). Six entries (Item difficulty, Item discrimination index, Observed score, Standard error of measurement, True score, Variance). Pages 251, 326, 441, 476, & 486. in J. Collins and N. O'Brian (Eds.). *The Greenwood Dictionary of Education (2nd ed.)*. Greenwood Press: Westport, CT.
- Kim, Y.B., Kim, S., Kim, Y., Shin, H., Namgung, J., & **Jeon, M.** (2007). *Customer Satisfaction with Local Education Development*. Korean Educational Development Institute.
- **Jeon, M.** (2006). Causes of adolescent delinquency: logistic multilevel model analysis. *A Collection of Winning Papers of the 24th National Scientific Paper Competition for Graduate Students*, 1-34, Korean National Statistical Office.
- **Jeon, M.** (2005). Factors on short supplies of college applicants: two-level multilevel growth curve model analysis. *A Collection of Winning Papers of the 1st National Scientific Paper Competition Using Educational Data*, 32-52, Korean Educational Development Institute.
- **Jeon, M.** (2005). Impacts of students' cultural capital on academic achievements. *Yonsei Academic Journal*, 41, 84-110. (Winning paper of the 41st paper competition for graduate students, Yonsei University).
- Kim, Y.B., Ryu, H.G., Namgung, J.Y., **Jeon, M.**, Kim, I.H., & Kim, J.A. (2004). *Development of Education Satisfaction Survey*. Korean Educational Development Institute.

PRESENTATIONS

Invited Conference Sessions

- **Jeon, M.** (2020, July). [forthcoming] A latent space modeling approach to unveiling respondents' and items' dependence structures in item response analysis, International Meeting of Psychometric Society.
- **Jeon, M.** (2018, Oct). Recent development and applications of advanced item response theory models, Breakout session, CRESSTCON'18.
- **Jeon, M.** (2017). An autoregressive growth model for longitudinal item analysis. Award Session at the 2017 Annual Meeting of the National Council on Measurement in Education, San Antonio, TX.
- **Jeon, M.** & Lukowski, S.* (2016). Can behavior genetics benefit from psychometrics? The 3rd Mathematical and Computational Medicine Conference, Columbus, OH.
- **Jeon, M.** (2015). Estimation of complex generalized linear mixed models for measurement and growth. Award Session at the 2015 Annual Meeting of the National Council on Measurement in Education, Chicago, IL.
- **Jeon, M.** & De Boeck, P. (2014). Can fast and slow intelligence be differentiated?. The 2014 International Testing Commission conference, San Sabastian, Spain.
- **Jeon, M.**, Rijmen, F. & Rabe-Hesketh, S. (2012). A generalization of the multiple-group bifactor model with an application of differential item functioning. The 2012 International Meeting of the Psychometric Society, Lincoln, NE.
- Rijmen, F., **Jeon, M.**, von Davier, M. & Rabe-Hesketh, S. (2012). A third order item response theory model for modeling the effects of domains and subdomains in large-scale educational assessment surveys. The 2012 International Meeting of the Psychometric Society, Lincoln, NE.
- von Davier, M, Rijmen, F., Rabe-Hesketh, S., & **Jeon, M.** (2012). Stochastic estimation for discrete higher order latent structure models. The 2012 International Meeting of the Psychometric Society, Lincoln, NE.
- van der Linden, W.J. & **Jeon, M.** (2011). Detecting suspicious erasures on answer sheets. The 2011 Annual Meeting of the National Council on Measurement in Education, New Orleans, LA.
- **Jeon, M.** (2011). Estimation of the multiple-group bifactor model with an application of differential item functioning. The 2011 Annual Convention of Association for Psychological Science, Washington, DC.

Invited Talks/Seminars

- Wilson, M, Draney, K. & **Jeon, M.** (2019). Structural confirmatory mixture modeling in the measurement context. Invited paper in the Symposium in Honour of Jurgen Rost, at the 14th Conference of the Section on Methods and Evaluation of the German Psychological Society, Kiel, Germany.
- **Jeon, M.** (2017, Oct). An autoregressive growth model for longitudinal item analysis. Department of Education, Yonsei University.
- **Jeon, M.** (2017, May). A multidimensional Saltus item regression model for studying children's developmental stages in deductive reasoning. Human Development and Psychology, University of California, Los Angeles.
- **Jeon, M.** (2017, May). An autoregressive growth model for longitudinal item analysis. Department of Education, University of California, Los Angeles.
- **Jeon, M.** (2015, Oct). New findings from the 2015 OSCE data. Orthodontics division, Department of Dentistry, The Ohio State University.
- **Jeon, M.** (2015, Mar). Evaluation of the objective structured clinical examination (OSCE) from 2003-2014. Orthodontics division, Department of Dentistry, The Ohio State University.

- **Jeon, M.** (2014). A modular approach for item response theory modeling with **flirt**. Quantitative Psychology, Catholic University Leuven, Belgium.
- **Jeon, M.** (2013). Flexible item response theory modeling with **flirt**. Quantitative Psychology, The Ohio State University.
- **Jeon, M.** & Rabe-Hesketh, S. (2012). An autoregressive IRT growth model for longitudinal item analysis. Educational Testing Service.
- **Jeon, M.** (2010). Estimation of Type A value-added school effects. Berkeley Evaluation and Research Center, UC Berkeley.
- **Jeon, M.** & Su, Y.H. (2008). Formative Assessment Delivery System (FADS) for teaching Investigating, Questioning our World through Science and Technology (IQWST), University of Michigan.

Contributed Conference Presentations

- DeBoeck, P. & **Jeon, M.** (2019). Roles and uses of response times in Psychometrics, Annual Meeting of the National Council on Measurement in Education, Toronto, Canada.
- DiTrapani, J.*, Rockwood, N.* & **Jeon, M.** (2018). Modeling extreme response styles in behavioral genetics using IRTrees. The 2018 International Meeting of the Psychometric Society, New York, NY.
- Chi, W. E.*, Melguizo, T., **Jeon, M.**, Park, E. S. Y. & Kezar, A. (2018) College engagement as a mediator of psychosocial outcomes in a college transition program. Society for Research on Educational Effectiveness Spring Conference, Washington, DC.
- Montoya, A. K.*, & **Jeon, M.** (2018). MIMIC models for uniform and non-uniform DIF as mediation and moderated mediation models. American Education Research Association Annual Meeting, New York, NY
- Chi, W. E.*, Melguizo, T., **Jeon, M.**, Park, E. S. Y. & Kezar, A. (2018) A comprehensive college transition program and nonprogram peer and faculty interactions: An application of mediation analysis. American Education Research Association Annual Meeting, New York, NY.
- **Jeon, M.** & De Boeck, P. (2017). A generalized item response tree approach for educational and psychological assessments. Coordinated symposium at the 2017 Annual Meeting of the American Educational Research Association, San Antonio, TX.
- DiTrapani, J.*, Rockwood, N.*, & **Jeon, M.** (2017). IRT analysis using the SPIRIT macro in SPSS. The 2017 Annual Meeting of the National Council on Measurement in Education, San Antonio, TX.
- Lukowski, S.*, DiTrapani, J.*, Wang, Z.*, **Jeon, M.**, Schenker, V., & Petrill, S. (2016). Multidimensionality in the measurement of math-specific anxiety and its relationship with math performance. The 2016 Annual Convention of Association for Psychological Science, Chicago, IL.
- Tapal, A.*, DiTrapani, J.*, **Jeon, M.**, Hong, A.*, Eman, H., Knobloch, L., & Kim, D-G. (2016). Evaluation of research diagnostic criterion for Temporomandibular Joint Disorder. The 2016 American Association for Dental Research conference, Los Angeles, CA.
- Park, S., Lee, Y., Tark, K., **Jeon, M.** & Yi, D-J. (2016). Multivoxel pattern similarity predicts subsequent recollection for scenes repeated across different encoding contexts. The 2016 Cognitive Neuroscience conference, New York, NY.
- Park, S., Do, J-R., Lee, H., Tark, K., Kim, K., **Jeon, M.** & Yi, D-J. (2016). Dissociating the effects of pre-experimental vs. Intra-experimental familiarity on source memory: An fMRI study. The 2016 Cognitive Neuroscience conference, New York, NY.
- Tijmstra, J., Bolsinova, M. A., & **Jeon, M.** (2015). Generalized mixture IRT models with different item-response structures: A case study using Likert-scale data. The 2015 International Meeting of the Psychometric Society, Beijing, China.

- DiTrapani, J.* & **Jeon, M.** (2015). Can slow and fast intelligence be differentiated? The 2015 Annual Convention of Association for Psychological Science, New York, NY.
- De Boeck, P., Chen, H. & **Jeon, M.** (2015). A test for response-time homogeneity of item responses. The 2015 Annual Meeting of the National Council on Measurement in Education, Chicago, IL.
- **Jeon, M.**, Draney, K. & Wilson, M. (2013). A general saltus LLTM-R for cognitive assessments. The 2013 International Meeting of the Psychometric Society, Arnhem, The Netherlands.
- **Jeon, M.** & Rabe-Hesketh, S.(2013). Monte Carlo local likelihood for approximate MLE of complex models. The 2013 International Meeting of the Psychometric Society, Arnhem, The Netherlands.
- **Jeon, M.**, Rabe-Hesketh, S. & Rijmen, F. (2013). A bifactor multiple-trait multiple-method model. The 2013 Annual Meeting of the National Council on Measurement in Education, San Francisco, CA.
- **Jeon, M.** & Rabe-Hesketh, S. (2013). An autoregressive IRT growth model for longitudinal item analysis. The 2013 Annual Meeting of the National Council on Measurement in Education, San Francisco, CA.
- **Jeon, M.** & Rijmen, F. (2012). Gaussian variational approximation for item response models with crossed random effects. The 2012 Annual Meeting of the National Council on Measurement in Education, Vancouver, Canada.
- Rijmen, F., **Jeon, M.**, von Davier, M. & Rabe-Hesketh, S. (2012). Higher order item response theory models for large-scale educational assessment surveys. The 2012 Annual Meeting of the National Council on Measurement in Education, Vancouver, Canada.
- Von Davier, M, Rijmen, F., Rabe-Hesketh, S., & **Jeon, M.** (2012). When is a dimension a dimension? Analysis of TIMSS data with MTMM and bifactor IRT models. The 2012 Annual Meeting of the National Council on Measurement in Education, Vancouver, Canada.
- van der Linden, W.J., **Jeon, M.** & Ferrara, S. (2011). A paradox in the study of the benefits of test-item review. The 2011 International Meeting of the Psychometric Society, Hong Kong.
- Rijmen, F. & **Jeon, M.** (2011). A variational approximation estimation method for item response theory models with random item effects across countries. The 2011 International Meeting of the Psychometric Society, Hong Kong.
- **Jeon, M.** & Rijmen, F. (2011). Variational approximate inference for item response models with crossed random effects. The 2011 Annual Meeting of National Council on Measurement in Education, New Orleans, LA.
- **Jeon, M.** & Rijmen, F. (2010). Assessing differential item functioning for testlet-based tests using the bifactor model. The 2010 Annual Meeting of National Council on Measurement in Education. Denver, CO.
- **Jeon, M.** & Lee, G. (2009). A comparison of generalizability theory and multilevel models for estimating conditional standard errors of measurement for testlet-based tests, The 2009 Annual Meeting of National Council on Measurement in Education, Graduate student poster session, San Diego, CA.
- **Jeon, M.** & Rabe-Hesketh, S. (2008). Multilevel modeling of educational longitudinal data with crossed random effects. 2008 Fall North American Stata Users Group meeting, San Francisco, CA.
- Lee, G., Park, D.S., Nam, M., Kim, M., **Jeon, M.**, & Kim, K.S. (2008). Cheating proof testing system (CPTS) and its validity. The 2009 Annual Meeting of National Council on Measurement in Education, New York, NY.
- **Jeon, M.**, Hwang, J.W., Lee, G.M., & Kang, S.J. (2007). Estimating the reliability of school level scores under multilevel and generalizability theory models. The 2007 Annual Meeting of National Council on Measurement in Education, Chicago, IL.

- Kang, S.J. & **Jeon, M.** (2006). Impacts of academic achievements and family income on self-esteem: differences in the high school equalization and non-equalization regions. The 1st Educational Panel Study Conference, Seoul, Korea.
- Kang, S.J. & **Jeon, M.** (2006). The cross-level interaction effects between the high school equalization policy and the peer relationships on high school students' self-esteem. The 2006 Annual Spring Meeting of Korean Educational Evaluation Society, Seoul, Korea.
- Kim, Y.B., Ryu, H.G., Namgung, J.Y., **Jeon, M.**, Kim, I.H., & Kim, J.A. (2006). Development of an education satisfaction survey. The 2006 Annual Fall Meeting of Korean Educational Evaluation Society, Seoul, Korea.
- Kang, S.J., **Jeon, M.**, & Chang, J.H. (2005). Students' problematic behaviors in the general and vocational high schools: three-level multilevel analysis. The 1st Korean Education and Employment Panel Data Conference, Seoul, Korea.
- **Jeon, M.** & Kang, S.J. (2005). A comparison of multilevel models in parameter estimation: two- and three- level nested and cross-classified models. The 2005 Annual Spring Meeting of Korean Educational Evaluation Society, Seoul, Korea.

SOFTWARE DEVELOPMENT

SPSS macro *SPIRIT* *2017*

DiTrapani, J.*, Rockwood, N.* & Jeon, M.

- User-friendly, point-and-click tool for IRT analysis in SPSS

R package *PLmixed* *2017*

Jeon, M. & Rockwood, N.*

- A profile likelihood maximum likelihood estimation of generalized linear mixed models with factor structures
  (available at https://cran.r-project.org/web/packages/PLmixed/index.html)

R package *flirt* *2013, 2014*

Jeon, M., Rijmen, F., and Rabe-Hesketh, S.

- Flexible IRT modeling of binary and polytomous item responses using 1PL and 2PL uni- and multi-dimensional, bifactor, second-order IRT models with item and person covariates, multiple groups and differential item functioning, using efficient EM algorithm based in graphical model theory
  (available at https://sites.google.com/site/arbormj/sofware/flirt)

Matlab code *BNLflirt* *2013*

Rijmen, F. and Jeon, M.

- Matlab code for *flirt*.

R package *mcll* *2012*

Jeon, M., Kaufman, C., and Rabe-Hesketh, S.

- Monte Carlo local likelihood estimation for complex models with latent variables, such as generalized linear and nonlinear mixed models with crossed random effects and state-space models
  (available at http://cran.fhcrc.org/web/packages/mcll/index.html)

WORKSHOPS

A graphical and nonlinear mixed model approach to IRT with `flirt` *with Dr.Frank Rijmen*

- Oct, 2017: Department of Psychology, Yonsei University, Seoul, South Korea
- April, 2015: National Council on Measurement in Education conference, Chicago, IL
- Mar, 2015: University of Jena, Germany
- Jan, 2015: Hector-Institute of Education Science and Psychology, University of Tübingen, Germany
- July, 2014: Graduate School of Education, UC Berkeley, CA
- June, 2014: Educational Testing Service, Princeton, NJ
- May, 2014: Department of Psychology, Ohio State University, OH
- May, 2014: Korean Society for Educational Evaluation, Seoul, South Korea
- May, 2014: Educational measurement and statistics, Yonsei University, South Korea
- April, 2014: National Council on Measurement in Education conference, Philadelphia, PA
- A variety of item response theory models conceptualized in generalized linear and nonlinear modeling framework. Efficient maximum likelihood estimation using a modified EM algorithm with graphical model theory. Illustrations with R package `flirt` for flexible item response modeling in R.

Psychometric analyses using `gllamm` *with Dr.Nina Breinegaard*

- Sep, 2013: Department of psychology, Free University of Berlin, Germany
- Various psychometric analysis with item response theory, structural equation models, factor models, and latent class models using software `gllamm` that is based on a general latent variable modeling framework

Item response modeling using `gllamm`

- April, 2013: Graduate School of Education, UC Berkeley
- Various item response modeling using software `gllamm` that is based on a general latent variable modeling framework

GRANTS

Funded Research

- *Dean's Diversity Student Support Initiative*, UCLA GSE&IS
  Role: PI
  Total $30,000, Sep 2019 - June 2020

- *A Family of Diagnostic Models for Evaluating Learning Progressions*, National Science Foundation.
  Role: Advisory Board (PI: Madison, M.)
  Total $211,130, 2019-2022

- *Faculty Research Grant*, UCLA
  Role: PI
  Total $6,790, Sep 2019 - June 2020

- *Dean's Diversity Student Support Initiative*, UCLA GSE&IS
  Role: PI
  Total $26,129, Sep 2018 - June 2019

- *Faculty Career Development Award*, UCLA
  Role: PI
  Total $14,765, Sep 2017 - June 2018

- *New psychometric models for 21st century educational survey assessments*, Institute of Education Sciences.
  Role: Co-I (PI: Rijmen, F., von Davier, M., Rabe-Hesketh, S.)
  Total $1,200,000, 2011-2014 (OSU sub-award $85,000, Jul 2013 - Dec 2014)

PROFESSIONAL ACTIVITIES

Visiting scholars/students

- Prof. Hak Ping Tam (National Taiwan Normal University, Taiwan; 2017 Summer)
- Prof. Tacksoo Shin (Myoung-ji University, Korea; 2017-2018)
- Jevan Luo (graduate student at Huazhong University of Science and Technology, China; 2017 Fall-Winter)
- Francisca Calderon Maldonado (graduate student at Pontificia Universidad Catolica de Chile; 2019-2020 Fall-Spring)

Conference award panel

- 2017 International Meeting of Psychometric Society (IMPS) travel awards

Conference organizing committee

- 2016 Mathematical and Computational Medicine conference

Conference proposal reviewer

- National Council on Measurement in Education (NCME) conference proposal review panel (Area: psychometric models)
- American Psychological Association (APA) conference proposal review

Grant proposal reviewer

- National Science Foundation (Methodology, Measurement, and Statistics)
- Swiss National Science Foundation (Humanities and Social Sciences)
- Poland National Science Foundation

Ad-hoc reviewer

- Applied Psychological Measurement
- Assessment for Effective Intervention
- Behaviormetrika
- Biometrics
- British Journal of Mathematical and Statistical Psychology
- Educational Assessment
- Educational Measurement: Issues and Practice
- Educational and Psychological Measurement
- Frontiers in Applied Mathematics and Statistics
- Health and Quality of Life Outcomes

- Intelligence
- International Journal of Quantitative Research in Education
- Journal of Applied Statistics
- Journal of Educational and Behavioral Statistics
- Journal of Educational Measurement
- Journal of Intelligence
- Journal of Psychopathology & Behavioral Assessment
- Journal of Quantitative Research in Education
- Large-scale Assessment in Education, Educational Assessment
- Measurement
- Multivariate Behavioral Research
- Nursing Research
- Psychological Review
- Psychometrika
- Review of Educational Research
- Sage Open (Psychology)
- Structural Equation Modeling: A Multidisciplinary Journal
- Wiley (book proposal review)

University Service

- UCLA Advisory Committee for Undergraduate Education (Curriculum development), 2019- Present
- UCLA Faculty Retreat Professional Development committee, 2019- Present
- UCLA Committee for Research Apprenticeship Course, 2018
- UCLA Committee for Degrees and Academic Standards, 2016- Present
- OSU Graduate Faculty Representative, 2016
- OSU Psychology Diversity committee, 2013-2016

Doctoral Advising

- Jevan Luo (advisee, UCLA, Social Research Methodology)
- Minho Lee (advisee, UCLA, Social Research Methodology)
- Eric Ho (co-advisee, UCLA, Social Research Methodology)
- Meredith Langi (co-advisee, UCLA, Social Research Methodology)
- Joe Garand (co-advisee, UCLA, Social Research Methodology)
- Jack DiTrapani (advisee, OSU, quantitative psychology)

Ph.D Dissertation Committees

- Shujin Zhong (co-chair, UCLA, Social Research Methodology)
- Minh Pho (co-chair, UCLA, Social Research Methodology)
- Keye Xu (UCLA, Human Development & Psychology)
- Jungwon Kim (UCLA, Social Sciences and International/Comparative Education)
- Hye-Young Yun (UCLA, Human Development & Psychology)
- Jung-Eun Yun (UCLA, Social Research Methodology)
- Jayashri Srinivasan (UCLA, Social Research Methodology)
- Casey Codd (OSU, quantitative psychology)

- Andy Bodine (OSU, quantitative psychology)
- Yinghao Sun (OSU, quantitative psychology)
- Eunhee Keum (OSU, quantitative psychology)
- Leanne Williamson (OSU, quantitative psychology)

Ph.D Candidacy Exam Committees

- Brenden Bishop (OSU, quantitative psychology)
- Rick Farouni (OSU, quantitative psychology)
- Leanne Williamson (OSU, quantitative psychology)

MA Thesis Committees

- Bang Quan Zheng (UCLA, statistics)
- Jack DiTrapani (chair, OSU, quantitative psychology)
- Brenden Bishop (OSU, quantitative psychology)
- Jennifer Burzynski (OSU, orthodontics, dentistry)
- Chong Zhang (Leiden University (the Netherlands), quantitative psychology)

PROFESSIONAL AFFILIATIONS

- Psychometric Society
- American Psychological Association
- Association for Psychological Science
- American Educational Research Association
- National Council on Measurement in Education