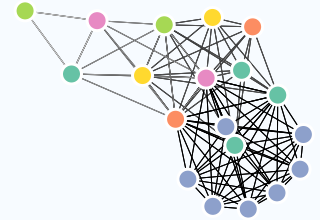


YICHI ZHANG

Highly motivated graduate student interested in psychometrics and statistical models. Focused on practical implications of measurement issues in applied psychological research and robust statistical models. Fast learners with strong desire to learn new areas in statistics and software. Dedicated team members with strong communication skills.



EDUCATION

2024
|
2019/08

● **PhD. Student, Quantitative Methods and Computational Psychology**

University of Southern California

 Los Angeles, CA

- Relevant Coursework: Fundamental of Psychological Measurement, Classic and Modern Statistic Methods, Multilevel Modeling, Bayesian Data Analysis, Applied Machine Learning, Data Analysis for Categorical Variables, Cognitive Development in Children
- Relevant Workshop: Introduction to flexMIRT by Li Cai, Michael Edwards and Carrie R. Houts, Longitudinal Data Analysis Using SEM by Paul D. Allison

2019/05
|
2015/08

● **B.S., Mathematics, Psychology**

Dickinson College

 Carlisle, PA

- Pi Mu Epsilon National Honorary Mathematics Society
- Psi Chi, the International Honor Society in Psychology

RESEARCH EXPERIENCE

Current
|
2020/08

● **Research Assistant**

University of Southern California

 Los Angeles, CA

- Evaluation of "Identity-Based Motivation Journey to Academic Success" (Department of Education/i3; Supervisor: Lai, M. H. C.)
 - Conduct attrition analysis and reliability analysis for large scale assessment data
 - Make tables and prepare the report using R packages knitr, flextable, and modelsummary
- Developing and Validating Early Assessments of College Readiness: Differential Effects for Underrepresented Groups, Optimal Timing of Assessments, and STEM-specific Indicators (National Science Foundation, Research on Learning in Formal and Informal Settings; Supervisor: Palardy, G. J.)
- Conducted Principle Component Analysis using data from Educational Longitudinal Study of 2002 (ELS: 2002) in R
- Tested Measurement invariance using auxiliary variables to account for missing data in Mplus

CONTACT

 yzhang97@usc.edu

 [linkedin.com/in/yichi-zhang-312164201/](https://www.linkedin.com/in/yichi-zhang-312164201/)

 (213) 458-3486

Made with the R package
pagedown.

Last updated on 2021-02-06.

Current
|
2020/08

Research Assistant

University of Southern California

📍 Los Angeles, CA

- Developing a Multidimensional Psychometric Framework on the Impact of Item Bias on Classification (Department of Defense/Army Research; Supervisor: Lai, M. H. C.)
- Extend the selection accuracy framework to multidimensions
- Illustrate the framework using a real data example that investigates measurement invariance of personality scale across gender
- Prepare annual reports

2020/12
|
2020/08

Student Researcher

University of Southern California

📍 Los Angeles, CA

- Wrote functions for sentiment analysis and machine learning algorithms such as Perceptron classifier, Naive Bayes classifier and classification tree classifier.
- Compared the performance of evaluation methods in multilevel modeling for small samples with heteroscedasticity and outliers using Monte Carlo simulation

2019/05
|
2017/04

Undergraduate Researcher

Dickinson College

📍 Carlisle, PA

- Conducted an experiment on testing the role of appraisal among the relationship between bicultural and creativity
- Designed an experiment and collected data in a small research group about the impact of reminded stigma on gay and lesbians' cognitive depletion, brief fear of negative evaluation and positive affect
- Coded survey items about stereotypes of social classes into data



PUBLICATION AND CONFERENCE

Current
|
2019/08

Publication

- Zhang, Y., Lai, M. H. C., & Palardy, G. J. (Manuscript submitted). A Bayesian Region of Measurement Equivalence (ROME) Approach for Establishing Measurement Invariance.
- Lai, M. H. C., & Zhang, Y. (In progress). Evaluating the impact of partial factorial invariance in selection using multidimensional tests.
- Lai, M. H. C., & Zhang, Y. (In progress). Adjusting for measurement error in cluster means in multilevel modeling: Two numerically stable alternatives to latent-mean centering.

2020/07
|
2020/06

Conference

- Zhang, Y. & Lai, M. H. C. (2020, July 14-17). A Bayesian framework for establishing measurement invariance for observed test scores (Poster Session). Annual Meeting of the Psychometric Society (IMPS), College Park, MD, United States.
- Zhang, Y., & Lai, M. H. C. (2020, June). A Bayesian framework for establishing measurement invariance for observed test scores (Poster Session). Modern Modeling Methods Conference, Storrs, CT, United States.




COMPUTER SKILLS

- R (lavaan, blavaan, lme4, brms, igraph, tm)
- Mplus
- Stata
- Stan
- flexMIRT
- Markdown, Rswave, Latex
- Keras




TEACHING EXPERIENCE

2020/05
|
2019/08

- **Teaching Assistant**
University of Southern California  Los Angeles, CA
 - PSYC 274 Lg: Statistics and PSYC 100 Lg: Introduction to Psychology
 - Led lab sections of 50 students, planned lessons and activities


2018/12
|
2017/08

- **The Quantitative Reasoning Center Tutor**
Dickinson College  Carlisle, PA
 - Assisted students with questions about Math and Psychology




AWARD

2020/12
|
2019/08

- **First-Year Dornsife PhD Academy Psychology Department Research Award**
Dornsife College of Letters, Arts and Sciences  University of Southern California
 - Awarded \$400

2020/07
|
2020/01

- **Psychology Department Travel Grant Award**
Dornsife College of Letters, Arts and Sciences  University of Southern California
 - Awarded \$1000