

Pengda Wang

651-202-6008 | pw32@rice.edu | linkedin.com/in/pengda-wang | wpengda.github.io/

Education

Rice University

Ph.D. in Industrial Organizational Psychology

GPA: Psychology: 4.0/4.0

Houston, TX

Anticipated: May 2028

Rice University

M.A. in Industrial Organizational Psychology; Qualifying Exams

GPA: Psychology: 4.0/4.0

Houston, TX

Oct 2025

Master Thesis: *"I've read your stories, I know who you are": Reliability, validity, and interpretability of generative AI personality ratings*

Committee Members: Dr. Frederick L. Oswald (Chair), Dr. Tianjun Sun, Dr. Hanjie Chen

University of Minnesota-Twin Cities

B.S. in Psychology; B.A. in Computer Science

GPA: Psychology: 3.9/4.0; Computer Science: 4.0/4.0

Minneapolis, MN

Sep 2019 – May 2023

Research Interests

1. Personnel selection (e.g., faking, bias, selection experience, ML applications, responsible AI use).
2. Individual differences (e.g., personality traits and facets, dark personalities, social behaviors).
3. Psychometrics & Research methods (e.g., SEM, computational measurement, big data approaches).
4. Cross-cultural psychology (e.g., measurement invariance, tech-based/large-scale assessments).

Publications

1. **Wang, P.**, Zou, H., Jiang, H., Chen, H., Sun, T., Yi, X., Xiao, Z., & Oswald, F. L. (2026). Generative personality simulation via theory-informed structured interview. *European Chapter of the Association for Computational Linguistics (EACL 2026)*. <https://arxiv.org/abs/2502.12109v2>
2. Zou, H., **Wang, P.**, Yan, Z., Sun, T., & Xiao, Z. (2025). Can LLM “self-report”?: Evaluating the validity of self-report scales in measuring personality design in LLM-based chatbots. *Conference on Language Modeling (COLM 2025)*. <https://doi.org/10.48550/arXiv.2412.00207>
3. **Wang, P.**, Loignon, A. C., Shrestha, S., Banks, G. C., & Oswald, F. L. (2024). Advancing organizational science through synthetic data: A path to enhanced data sharing and collaboration. *Journal of Business and Psychology*. <https://doi.org/10.1007/s10869-024-09997-w> [Editor Commendation (top 22 out of 1600 articles)]
4. **Wang, P.**, Myeong, H., & Oswald, F. L. (2024). On putting the horse (raters and criteria) before the cart (variance components in ratings). *Industrial and Organizational Psychology*, 1–5. <https://doi.org/10.1017/iop.2024.16>
5. **Wang, P.***, Xiao, Z.*., Chen, H., & Oswald, F. L. (2024). Will the real Linda please stand up. . .To large language models? Examining the representativeness heuristic in LLMs. *Conference on Language Modeling (COLM 2024)*. <https://doi.org/10.48550/arxiv.2404.01461> [Oral spotlight presentation (top 2%)]
6. Myeong, H., **Wang, P.**, & King, E. B. (2024). The weight of beauty in psychological research. *Industrial and Organizational Psychology*, 17(1), 111–114. <https://doi.org/10.1017/iop.2023.87>

Pre-prints

1. Xuan, K., **Wang, P.**, Ye, C., Yu, H., August, T., & You, J . (2026). SocialVeil: Probing social intelligence of language agents under communication barriers. *arXiv (Cornell University)*.
<https://doi.org/10.48550/arXiv.2602.05115>
2. Yan, Z., Sylvara, A., **Wang, P.**, Sun, T., & Xiao, Z. (2025). Personality auto-scoring with large language models using a realistic accuracy model of behavioral cues in chatbot interviews. *PsyArXiv*.
https://doi.org/10.31234/osf.io/rtsm5_v1
3. Jiang, H.*., **Wang, P.*.**, Yi, X., Xie, X., & Xiao, Z. (2025). The incomplete bridge: How AI research (mis)engages with psychology. *arXiv (Cornell University)*. <https://doi.org/10.48550/arXiv.2507.22847>
4. Sylvara, A., **Wang, P.**, Sun, T., Heimann, A. L., & Ingold, P. V. (2025). Automating personality-based employment interviews: Development and validation of an artificial intelligence chatbot. *PsyArXiv*.
https://doi.org/10.31234/osf.io/9ktmf_v3
5. Yang, Y.*., **Wang, P.*.**, Plonsky, L. D., Oswald, F. L., & Chen, H. (2024). From babbling to fluency: Evaluating the evolution of language models in terms of human language acquisition. *arXiv (Cornell University)*. <https://doi.org/10.48550/arXiv.2410.13259>
6. **Wang, P.**, Zou, H., Yan, Z., Guo, F., Sun, T., Xiao, Z., & Zhang, B. (2024). Not yet: Large language models cannot replace human respondents for psychometric research. *PsyArXiv*.
<https://doi.org/10.31219/osf.io/rwy9b>

Manuscripts Under Revision and Review

1. **Wang, P.**, Chen, H., Oswald, F. L., & Sun, T. (1nd revise & resubmit). TITLE REMOVED FOR BLIND REVIEW. [Topic: personalized augmented data generation]. *Assessment*; Special Issue: AI, Machine Learning, and Assessment.
2. Sylvara, A., **Wang, P.**, Sun, T., Heimann, A. L., & Ingold, P. V. (2nd revise & resubmit). TITLE REMOVED FOR BLIND REVIEW. [Topic: AI chatbot personality-based employment interview]. *Journal of Occupational and Organizational Psychology*.
3. Xuan, K., **Wang, P.**, Yu, H., August, T., & You, J. (under review). TITLE REMOVED FOR BLIND REVIEW. [Topic: high fidelity social interaction environment for multi-agents evaluation]. *ICML 2026*.
4. **Wang, P.**, Zou, H., Yan, Z., Guo, F., Sun, T., Xiao, Z., & Zhang, B. (1st revise & resubmit). TITLE REMOVED FOR BLIND REVIEW. [Topic: Compare large language models vs. human respondents for psychometric research]. *Psychological Methods*.
5. Yan, Z., Li, Y., **Wang, P.**, Chu, C., Sun, T., Zhang, B., & Xiao, Z. (under review). TITLE REMOVED FOR BLIND REVIEW. [Topic: Reliability and validity in Human-Computer Interaction research measurements]. *ACM Transactions on Computer-Human Interaction*.
6. Yang, Y.*., **Wang, P.*.**, Plonsky, L. D., Oswald, F. L., & Chen, H. (under review). TITLE REMOVED FOR BLIND REVIEW. [Topic: Linguistic theory and psycholinguistic theory view of language model development]. *Transactions of the Association for Computational Linguistics*.

Conference Presentations

1. Zou, H., **Wang, P.**, Yan, Z., Sun, T., & Xiao, Z. (2025). Can LLM “self-report”?: Evaluating the validity of self-report scales in measuring personality design in LLM-based chatbots. [Poster]. Conference on Language Modeling (COLM 2025), Montreal, QC, Canada.
2. **Wang, P.**, Sylvara, A., Sun, T., Hebl, M. R., & Oswald, F. L. (2025). Differential embedding dimension functioning in natural language processing for psychological assessment. [Oral presentation]. International Meeting of the Psychometric Society (IMPS 2025), Minneapolis, MN, United States.

3. **Wang, P.**, & Oswald, F. L. (Co-Chairs) (2025). Bridging Disciplines: How Computer Science and I-O Psychology Benefit Each Other. [Alternative Session Type]. Society for Industrial and Organizational Psychology Annual Conference (SIOP 2025), Denver, CO, United States.
4. **Wang, P.**, Zou, H., Yan, Z., Guo, F., Sun, T., Xiao, Z., & Zhang, B. (2025). Not yet: Large language models cannot replace human respondents for psychometric research. In Hickman, L., & Liu, M.(Co-Chairs) (2025). Machine learning for I-O 7.0: Large language models for assessments. [Symposium]. Society for Industrial and Organizational Psychology Annual Conference (SIOP 2025), Denver, CO, United States.
5. **Wang, P.**, Sylvara, A., Sun, T., Hebl, M. R., & Oswald, F. L. (2025). Differential embedding dimension functioning in natural language processing for psychological assessment. In Hou, D. X., & Sun, T. (Co-Chairs) (2025). Innovations in AI assessment of individual differences: Improving validity and equity. [Symposium]. Society for Industrial and Organizational Psychology Annual Conference (SIOP 2025), Denver, CO, United States.
6. **Wang, P.***, Xiao, Z.* , Chen, H., & Oswald, F. L. (2024). Will the real Linda please stand up. . .To large language models? Examining the representativeness heuristic in LLMs. [Oral presentation]. Conference on Language Modeling (COLM 2024), Philadelphia, PA, United States. **[Oral spotlight presentation (top 2%)]**
7. **Wang, P.**, & Oswald, F. L. (2024). Leveraging synthetic data for advancements in organizational research. In Liou, G., & Tay, L. (Co-Chairs) (2024). Future of performance prediction and evaluation: Artificial intelligence and big data. [Symposium]. Society for Industrial and Organizational Psychology Annual Conference (SIOP 2024), Chicago, IL, United States.
8. Wu, F., **Wang, P.**, & Oswald, F. L. (2024). The influence of disability and career challenges on vocational interests. In Hoff, K. A. (Chair) (2024). To RIASEC and beyond: Advances in vocational interest research. [Symposium]. Society for Industrial and Organizational Psychology Annual Conference (SIOP 2024), Chicago, IL, United States.

Selected Works in Progress

1. **Wang, P.**, Chen, H., Luo, J., Oswald, F. L., & Sun, T. (internal review stage). “I’ve read your stories, I know who you are”: Reliability, validity, and interpretability of generative AI personality ratings. [Master Thesis]. Target: *Journal of Personality and Social Psychology*.
2. **Wang, P.**, Sylvara, A., Oswald, F. L., Hebl, M. R., & Sun, T. (internal review stage). Differential embedding dimension functioning in natural language processing for psychological assessment. Target: *Journal of Applied Psychology*.
3. Sylvara, A., **Wang, P.**, Sargent, M., Gregg, E., Heron, X., & Sun, T. (internal review stage). Examining the faking resistance of an AI chatbot personality interview. Target: *Journal of Applied Psychology*.
4. **Wang, P.**, Su, J., Sun, T., & Oswald, F. L. (writing stage). Synthetic text, real insights: Generation, evaluation, and trade-offs in synthetic textual data for organizational research. Target: *Organizational Research Methods*.
5. **Wang, P.**, Xia, H., Chen, H., Sun, T., Behrend, T. S., & Oswald, F. L. (experiment stage). When models miss the shot: Bias in vision-language model performance evaluation. Target: *Science*.

Research Grants Funded

Industry Sponsored Research Grant (2025-2026)	\$280,394
<i>Topic: High-Performance Sports Psychology Assessment.</i>	<i>Student Collaborator</i>
CIISR Graduate Research Fellowship (2025)	\$1,500
<i>Rice University</i>	

Researcher Access Program (2024-2025)	\$5,000
<i>OpenAI</i>	
Mortensen Research Award & CLA Research Scholarship (2023)	\$1,500
<i>University of Minnesota</i>	

Teaching Experience

Teaching Assistant	Advanced Psychological Statistics
<i>Rice University</i>	<i>Houston, TX</i>
Teaching Assistant	Computational Linear Algebra
<i>University of Minnesota-Twin Cities</i>	<i>Minneapolis, MN</i>

Internship, Research and Work Experience

Chili Lab Research Assistant - with Dr. Hanjie Chen	August 2024 – Present
<i>Rice University</i>	<i>Houston, TX</i>
SMART Lab Research Assistant - with Dr. Tianjun Sun	August 2024 – Present
<i>Rice University</i>	<i>Houston, TX</i>
OWLab Research Assistant - with Dr. Frederick L. Oswald	August 2023 – Present
<i>Rice University</i>	<i>Houston, TX</i>
ML/AI Ph.D. Resident	May 2025 – Dec 2025
<i>Midjourney, Inc</i>	<i>San Francisco, CA</i>
CFL Lab Research Assistant - with Dr. Gail M. Ferguson	May 2022 – May 2023
<i>University of Minnesota-Twin Cities</i>	<i>Minneapolis, MN</i>
TNT Lab Research Assistant - with Dr. Richard N. Landers	April 2021 – May 2023
<i>University of Minnesota-Twin Cities</i>	<i>Minneapolis, MN</i>
Ones' Green Lab Research Assistant - with Dr. Deniz S. Ones	June 2020 – July 2022
<i>University of Minnesota-Twin Cities</i>	<i>Minneapolis, MN</i>

Service

Association for Computational Linguistics Rolling Review (ARR) Reviewer	2025 - Present
Conference on Language Modeling (COLM) Reviewer	2025 - Present
Conference on Neural Information Processing Systems (NIPS) Reviewer	2025 - Present
Society for Industrial and Organizational Psychology Annual Conference (SIOP) Reviewer	2024 - Present
Conference on Human Factors in Computing Systems (CHI) Reviewer	2024 - Present

Professional Affiliations

- Academy of Management, *Member*
 American Psychological Association, *Member*
 Association for Psychological Science, *Member*
 Society for Industrial and Organizational Psychology, *Member*

Skills

Languages: Python, R, Java, C, C++, JavaScript, HTML/CSS, SQL,
Developer Tools: Git, Google Cloud Platform, VS Code, PyCharm, IntelliJ, Eclipse
Software: Microsoft Word, Excel, PowerPoint, Access, Google Workspace

Professional References

Dr. Frederick L. Oswald
 Professor of Psychological Sciences; Herbert S. Autrey Chair in Social Sciences
 Rice University
 Email: foswald@gmail.com

Dr. Tianjun Sun

Assistant Professor of Psychological Sciences

Rice University

Email: ts110@rice.edu

Dr. Hanjie Chen

Assistant Professor of Computer Science

Rice University

Email: hc86@rice.edu

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