

EDUCATION

Georgia Institute of Technology, Atlanta.

Sep 2024 -Jan 2028 (Expected)

Ph.D. Candidate in Cognitive & Brain Science, Minor in Machine Learning | GPA: 3.81

M.S. in Computer Science

Comprehensive (Qualifying) Exams – Completed by September 15, 2025

Coursework: Modeling and Simulation, Computational Data Analysis, Data and Visual Analytics, Machine Learning, Regression, Statistics

Syracuse University

Syracuse, USA

Clinical Mental Health Counseling, Master of Science

08/2019-5/2022

Coursework: Research Methods, Theories of Counseling, Group Work in Counseling, Foundations of mental health counseling, Crisis Counseling, Psychological Diagnosis, treatment and psychopharmacology, and Internship

Hong Kong Baptist University

Zhuhai/Hongkong, China

Applied Psychology, Bachelor of Science (Honors)

09/2014 - 06/2018

Coursework: Experimental Psychology, Statistical theory, Computer-Aided Data Analysis, Counseling Psychology, Cognitive Psychology, Psychological Assessment and Testing, and Abnormal Psychology
Dissertation: “The Effect of Anxiety Sensitivity and Its Lower-order Anxiety Sensitivity Factors on Generalized Anxiety Disorder Tendency in China College Students.”

SKILLS

Programming & Computational Tools: R, Python (PySpark, pandas, NumPy, PyTorch, Matplotlib, TensorFlow), MATLAB, SQL, GitHub, Java, LaTeX, PsychoPy, SPSS, RevMan, Qualtrics, Tableau, Microsoft Excel

Neuroimaging Modalities: fMRI, sMRI, EEG

Neuroimaging Analysis Toolkits: FSL, FreeSurfer, ANTs, AFNI, MRIQC, fMRIprep, Nipype, GLMsingle, GingerALE, SDM, MNE

Quantitative & Modeling Expertise: Machine learning; Deep learning; Computational modeling (e.g., Bayesian inference, latent growth models); Advanced statistical methods (e.g., SEM, multilevel modeling, time-varying effect modeling); Psychometric analysis; Experimental design; Data visualization; Signal processing

Research & Communication: Scientific writing; Research communication; Public speaking; Data interpretation and presentation

Languages: Chinese (native), English (fluent), Japanese (basic)

PUBLICATION

Peer-reviewed Publications

- [1]. Ou, Y., Zhang, P., Yu, J., Li, M., Su, S., Zhang, M., **Feng, R.**, Sun, F., & Wu, J. (2025). *The application of the BERTopic model in natural language processing: In-depth text topic modeling*. In Proceedings of the 2025 5th International Conference on Consumer Electronics and Computer Engineering (ICCECE) (pp. 793–796). IEEE. <https://doi.org/10.1109/ICCECE65250.2025.10984639>
- [2]. **Feng, R.**, Mishra, V., Hao, X., & Verhaeghen, P. (2024). The Association Between Mindfulness, Psychological Flexibility, and Rumination in Predicting Mental Health and Well-Being Among University Students Using Machine Learning and Structural Equation Modeling. *Machine Learning with Applications*, 100614. <https://doi.org/10.1016/j.mlwa.2024.100614>
- [3]. Razza, R., Liu, Q., **Feng, R.**, Hao, X., Kirkman, K., & Merrin, G. J. (in press). Cultivating adolescents' self-compassion through mindfulness: The role of self-regulation at both the individual- and classroom-level. *Contemporary School Psychology*.
- [4]. Wang, Q., Wu, Y., **Feng, R.**, Hao, X., Felver, J. C., Zhang, Y., & Razza, R. (2024). Adaptation and Validation of the Mindful Student Questionnaire in Chinese. *Mindfulness*, 15(2), 359-371. <https://doi.org/10.1007/s12671-023-02299-x>
- [5]. Lee, P., Chen, S., Yu, Y., Chen, Y., **Feng, R.**, & Fan, X. (2019). The Effect of Mindfulness and Wisdom as Intervention to Deal with College Students' Internet Addiction. *International Journal of Psychology & Behavior Analysis*. 5, DOI: <https://doi.org/10.15344/2455-3867/2019/161>

- [6]. Hao, X., **Feng, R.**, Guimarães, A. L., Verhaeghen, P., & Turnbull, A. G. Mind–body interventions and brain changes in aging adults with mild cognitive impairment: A systematic review of structural and functional neuroimaging findings. (*in Revision of Neuropsychology Review*)
- [7]. **Feng, R.**, Hao, X., Coronado, B., & Verhaeghen, P. When Control Slips Away: Temporal Dynamics of Learned Helplessness and Cognitive Flexibility under Reward Uncertainty (*in Revision of Motivation and Emotions*)
PsyArXiv link: https://osf.io/preprints/psyarxiv/qj2av_v1
- [8]. **Feng, R.**, Hua, Z., Chen, P., Lin, T., & Veldhuis, C. A novel application of network analyses to examine how well LGBTQ research in LGBTQ journals reflects the diversity of the community (*in Revision of Annals of Behavioral Medicine*)

CONFERENCE

- Hao, X., **Feng, R.**, Guimarães, A. L., Verhaeghen, P., & Turnbull, A. G. (2025) Mind–body interventions and brain changes in aging adults with mild cognitive impairment: A systematic review of structural and functional neuroimaging findings. 2025 International Society for Contemplative Research, North Carolina, USA
- **Feng, R.**, Hua, Z., Chen, P., Lin, T., & Veldhuis, C. A novel application of network analyses to examine how well LGBTQ research in LGBTQ journals reflects the diversity of the community, 2, Minneapolis, USA, 2022.
- **Feng, R.** The Effect of Anxiety Sensitivity and Its Lower-order Anxiety Sensitivity Factors on Generalized Anxiety Disorder Tendency in China College Students. Singapore Conference on Applied Psychology (SCAP), Singapore. 2019
- **Feng, R.** The Effect of Delay Discounts on College Students with Online Shopping Addiction: Learned Helplessness as a Mediator Variable. Asian Conference on Psychology & the Behavioral Sciences, Tokyo, Japan. 2018

ONGOING PROJECTS

- [1]. Toward Generalizable Mind-Wandering Decoding: Integrating Shapelet and Coherence Features via Variational Autoencoder (Ongoing project since 2025)
- [2]. Mindfulness and Creative Problem-Solving with Sudden Insight: evidence from an electrophysiological study (Ongoing project since 2024)
- [3]. An Experimental Investigation of Emotional Counter-Regulation During the Priming Identify Task: an ERP study (Ongoing project since 2024)
- [4]. An Ecological Momentary Assessment (EMA) Study of Mind-Wandering, Affect, and State Mindfulness (Ongoing project since 2023)

WORK EXPERIENCE

Georgia Institute of Technology, Lab Instructor (Psychological Statistics for HCI) Jan – May 2025; Jan – May 2026

- Led weekly labs for Psychological Statistics, training about 30 students in R across end-to-end analytical workflows, including **data cleaning, visualization, and statistical modeling**.
- Mentored students in applying and interpreting **ANOVA, regression, and multivariate models**, with an emphasis on diagnostic reasoning and assumption checking to ensure statistical validity.

China Vanke Co., Ltd. (Vanke Group), Data Operations Intern –Tianjin, China Jan 2023 – Aug 2023

- Translated finance workflow requirements into functional specifications and supported API-based integration for a third-party financial data platform.
- Improved financial data standardization, mapping, and cleansing workflows by refining mapping logic, adding validation and exception handling, and coordinating with engineering and delivery teams to enhance data consistency and reduce manual reconciliation efforts by an estimated ~15–20%.

Institute of Economics of Education, Peking University Beijing, China
Research Assistant (Part-Time)| Supervisor: Dr. Hong Zhu 10/2022 – 05/2023

- Supported a longitudinal evaluation of lifelong education programs using behavioral and EEG data. Assisted with experimental paradigm design and preprocessing of neurophysiological signals.

SELF Lab-Syracuse University, Research Coordinator, Syracuse, NY
Jan 2021 – Jun 2022

- Analyzed a 2,121-participant mindfulness dataset using hierarchical multilevel models; built pipelines for large-scale cleaning, centering, model comparison, and variance-partitioning, contributing statistical insights to a peer-reviewed publication. **Publication Link:** <https://link.springer.com/article/10.1007/s40688-025-00548-5>
- Conducted ERP preprocessing (**resampling, average re-referencing, band-pass filtering, ocular artifact attenuation**) and analysis in MNE-Python, extracting N170/EPN/LPP amplitudes and testing regulation-condition effects with **repeated-measures ANOVAs**.

Mind-Body Lab, Syracuse University (volunteer, unpaid position)

Research Assistant | PI: Dr. Joshua Felver

Syracuse, USA

08/2021 – 06/2022

- Translated, collected, and analyzed data from the Mindful Student Questionnaire with 2,910 international adolescents to examine mindfulness factors (awareness, attention, acceptance) influencing school performance; co-authored a peer-reviewed publication in *Mindfulness* [4].
- Conducted TSST tests to aid graduate students in conducting experiments, including blood pressure measurements and response time data collection (2–3 times per week).

TEACHING EXPERIENCE

PSY 2020 – Psychological Statistic, Lab instructor, 2026 Spring

PSY 2020 – Psychological Statistic, Lab instructor, 2025 Spring

PSY 2020 – Psychological Statistic, Teaching assistant, 2024 Fall

PSY 1101 – General Psychology, Teaching assistant, 2024 Summer

PSY 2015 – Research Methods, Teaching assistant, 2024 Spring

PSY 3012 – Introduction to Cognitive Psychology, Teaching Assistant, 2023 Fall

ACADEMIC SERVICE

Coordinator for the Brown Bag Academic Presentation Series, School of Psychology, Fall 2024 – Spring 2025