Jungang Zou

jz3183@cumc.columbia.edu

Department of Biostatistics, Columbia University, 722 West 168th Street New York, NY 10032

Education

2022-27*	Ph.D., Biostatistics, Columbia University
$2019-22^{\dagger}$	M.S., Biostatistics, Columbia University
2015-19	B.E. , Software Engineering, Xiamen University, China

Research Experience

2021-	Graduate Research Assistant, Columbia University, (Advisor: Dr. Qixuan
	Chen)
2020-	Graduate Research Assistant, Rutgers University, (Advisor: Dr. Liangyuan
	Hu)
2018	Undergraduate Research Assistant, Harvard Medical School (Advisors: Dr.
	Fan Lin and Dr. Gil Alterovitz)

Publications

G Google Scholar

Journal Articles

- J1. Flores, N. M., Lovinsky-Desir, S., Divjan, A., Hoepner, L. A., **Zou, J**, Miller, R. L., Herbstman, J. B., Perera, F. P., Perzanowski, M. S. & Chen, Q. Trajectory analysis of rhinitis in a birth cohort from lower-income New York City neighborhoods. *Journal of Allergy and Clinical Immunology* **154**, 111–119 (2024).
- J2. Greenleaf, A. R., Francis, S., **Zou, J**, Farley, S. M., Lekhela, T., Asiimwe, F. & Chen, Q. Influenza-Like Illness in Lesotho From July 2020 to July 2021: Population-Based Participatory Surveillance Results. *JMIR Public Health Surveill* **10**, e55208 (2024).
- J3. Onyilofor, C., Feng, B., Zou, J, Barbecho, J. M., Duran, A. T., Ye, S., Garcia, O., Singer, J., Chen, Q. & Moise, N. Assessing the Fidelity of Depression Screening Implementation in Coronary Heart Disease Patients: A Cross-Sectional Study. *Journal of the American Heart Association* 13, e035550 (2024).
- J4. Williams, S. Z., **Zou, J**, Liu, Y., Si, Y., Galea, S. & Chen, Q. Improving Survey Inference Using Administrative Records Without Releasing Individual-Level Continuous Data. *Statistics in Medicine* **43**, 5803–5813 (2024).

^{*}Expected.

^{*}Gap year between 2020-21 due to the spread of Covid-19.

- J5. Xu, Z., Scharp, D., Hobensack, M., Ye, J., **Zou, J**, Ding, S., Shang, J. & Topaz, M. Machine learning-based infection diagnostic and prognostic models in post-acute care settings: a systematic review. *Journal of the American Medical Informatics Association* **32**, 241–252 (2024).
- J6. Jadow, B. M., Hu, L., **Zou**, J, Labovitz, D., Ibeh, C., Ovbiagele, B. & Esenwa, C. Historical Redlining, Social Determinants of Health, and Stroke Prevalence in Communities in New York City. *JAMA Network Open* **6**, e235875–e235875 (2023).
- J7. Hu, L., **Zou**, J, Gu, C., Ji, J., Lopez, M. & Kale, M. A flexible sensitivity analysis approach for unmeasured confounding with multiple treatments and a binary outcome with application to SEER-Medicare lung cancer data. *The Annals of Applied Statistics* **16**, 1014–1037 (2022).

Peer-reviewed Conference Proceedings

C1. Moise, N., Sales, A., Luan, M., Feng, B., Jones, A., Gadbois, D., **Zou, J**, Kim, K., Schwartz, J. & Chen, Q. Examining determinants of long-term reach and effectiveness following collaborative care implementation to optimize the pace of sustainability efforts in Proceedings of the 17th Annual Conference on the Science of Dissemination and Implementation (AcademyHealth, Arlington, VA, 2024).

Preprints

- P1. Kim, K., Feng, B., Luan, M., **Zou, J**, Jones, A., Gadbois, D., Schwartz, J. E., Chen, Q. & Moise, N. Evaluating sustained reach and effectiveness of collaborative care models: A Cross-sectional study of the New York State Collaborative Care Medicaid Program. 2025. medRxiv: https://www.medrxiv.org/content/10.1101/2025.01.11.25320387v1.
- P2. Zhang, K., Li, Y., **Zou, J**, Wang, S., Fausto, B. & Hu, L. *Multi-level variable selection using a BART-enhanced mixed-effects framework.* Submit @Statistics in Medicine. 2025.
- P3. **Zou, J** & Hu, L. Nonparametric Bayesian Additive Regression Trees for Prediction and Missing Data Imputation in Longitudinal Studies. Under preparation. 2025.
- P4. **Zou, J**, Schwartz, J. E., Moise, N., Little, R. & Chen, Q. Generalizing Treatment Effects from Trials to EHR Populations using Propensity Score Predictive Inference. Under preparation. 2025.
- P5. **Zou, J**, Wang, S. & Chen, Q. *Bayesian MI-LASSO for Variable Selection on Multiply-Imputed Data* 2025. arXiv: 2211.00114v2 [stat.ME].
- P6. **Zou, J**, Lin, F., Gao, S., Deng, G., Zeng, W. & Alterovitz, G. *Transfer Learning Based Multi-Objective Genetic Algorithm for Dynamic Community Detection* 2021. arXiv: 2109.15136 [cs.SI].

Tools & Software

SBMTrees: Sequential Imputation with Bayesian Trees Mixed-Effects Models for Longitudinal Data (R | GitHub).

AuxSurvey: Survey Analysis with Auxiliary Discretized Variables (R | GitHub).

SAMTx: Sensitivity Assessment to Unmeasured Confounding with Multiple Treatments (R).

BMIselect: Bayesian MI-LASSO Models for Bayesian Variable Selection on Multiply-Imputed data (R | GitHub).

TMOGA: A Multi-Objective Genetic Algorithm for Dynamic Community Detection Problem (Pypi | GitHub).

Presentations

Contributed Talks

T1. **Zou, J.** Bayesian Machine Learning for Decision-Making with Incomplete Information ENAR 2023 Spring Meeting (Nashville, TN, USA). Mar. 2023.

Posters

- P1. **Zou, J** & Hu, L. *Nonparametric Bayesian Additive Regression Trees for Prediction and Missing Data Imputation in Longitudinal Studies* 14th International Conference on Bayesian Nonparametrics (Los Angeles, CA, USA). June 2025.
- P2. **Zou, J**, Schwartz, J. E., Moise, N., Little, R. & Chen, Q. *Generalizing Treatment Effect from EHR-Recruited Trials Using Bayesian Propensity Prediction* 2025 Columbia Biostatistics Annual Research Symposium (New York, NY, USA). Sept. 2025.
- P3. **Zou, J**, Wang, S. & Chen, Q. *Variable Selection for Multiply-imputed Data: A Bayesian Framework* 2023 Columbia Biostatistics Annual Research Symposium (New York, NY, USA). Sept. 2023.

Awards & Honors

Travel Grant for the 14th International Conference on BNP (\$300)

Teaching

Columbia University

2025 Fall	Teaching Assistant, Analysis of Health Surveys (P8123)
2025 Spring	Teaching Assistant, Data Science II (P8106)
2024 Fall	Teaching Assistant, Clinical Trial Methodology (P8142)
2024 Summer	Teaching Assistant, 2024 Statistical Analysis with Missing Data Workshop
2024 Spring	Teaching Assistant, Topics in Advanced Statistical Computing (P8160)
2023 Fall	Teaching Assistant, Analysis of Health Surveys (P8123)
2023 Summer	Teaching Assistant, 2023 Statistical Analysis with Missing Data Workshop
2023 Spring	Teaching Assistant, Statistical Inference (P8109)
2022 Fall	Teaching Assistant, Applied Regression II (P8110)
2021 Fall	Teaching Assistant, Analysis of Health Surveys (P8123)

Other Experience

2020	Software Engineer Intern, WorldQuant, Beijing, China.
	Last updated: October 14, 2025