Rui Nie

Ph.D. Student at University of Michigan, Ann Arbor, MI, USA
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RESEARCH INTERESTS

Statistical learning for health. Longitudinal data analysis and wearable device data.

EDUCATION

University of Michigan, Ann Arbor, MI, USA — Aug 2023 —
Ph.D. in Biostatsitics
University of Michigan, Ann Arbor, MI, USA — Aug 2020 — Apr 2023
Bachelor of Science in Honors Mathematics and Honors Statsitics

PUBLICATIONS AND THESIS

- Wang, P., Feng, H., Du, X., **Nie, R.**, Lin, Y., Ma, C., & Zhang, L. (2023). EEG-Based Evaluation of Aesthetic Experience Using BiLSTM Network. International Journal of Human–Computer Interaction, 1-14.
- **Nie, R.** & Tewari, A. (2023). *Exploring machine olfaction* [Unpublished bachelor's honors thesis]. University of Michigan.

RESEARCH EXPERIENCE

Song Lab, University of Michigan — Ann Arbor, USA
Graduate research assistant — Dec 2023 —

- Joint modeling on All-of-Us data as a part of evaluation for conformal prediction framework.
- Large Language Model for replicability assessment.

CompHCI Lab, University of Michigan — Ann Arbor, USA
Undergraduate reserach assistant — Sept 2022 — July 2023

- Local Interpretable Model-Agnostic Explanations (LIME) for medical image segmentation.
- Post-hoc explanation profile clustering for trustworthiness of machine learning models.

CASI Lab, University of Michigan — Ann Arbor, USA
Undergraduate reserach assistant — Sept 2021 — Apr 2023

- Predicting Human-generated Odor Labels from Molecular Representations with Graph Neural Networks.
- A general investigation of machine learning methods for modeling continuous human odor percept representation from molecular representations *(Thesis project)*.

Institute of Psychology, Chinese Academy of Science — Beijing, China
Research Intern — June 2021 — Feb 2022

- Investigated EEG's in evaluation of aesthetics experience for physical products using a BiLSTM network.

AWARDS AND HONORS

Outstanding Achievement in Mathematics Award, University of Michigan — Apr, 2023
Outstanding Undergraduate Major Award by Statistics Department, University of Michigan — Apr, 2023
Keeler Merit Scholarship by Mathematics Department, University of Michigan — June, 2022

OTHER EXPERIENCES

Research Volunteer for OLSHA STATCOM project, University of Michigan — 2024
Curriculum committee member at Biostatsitics Department, University of Michigan — 2023-2024

DEI School-wide Student Representative at Biostatsitics Department, University of Michigan   2023-2024
Student Volunteer at U-M Annual Data Science & AI Summit 2023   Nov, 2023
Leadership Board Member at Michigan Institute for Data Science (MIDAS)   2022-2023
Student Ambassador at Opportunity Hub of LSA, University of Michigan   2021-2022
Volunteer at Michigan Science Olympiad   Feb, 2022
Grader for Math 525, University of Michigan   Fall, 2021