

Jacob Trauger

✉ traugerjacob@gmail.com

in jacob-trauger

github traugerjacob

Python / R / Java / C++ / C / Hadoop / Spark / SQL / Haskell / ~~LaTeX~~ / Linux



Education

- 2021 – 2026 **Ph.D., University of Michigan: Statistics**
4th year Ph.D. student working under Ambuj Tewari on the theory of deep learning
- 2016 – 2020 **B.S., University of Illinois Urbana-Champaign: Statistics and Computer Science, Mathematics**
Graduated Cum Laude with Highest Distinction in both majors. GPA: 3.88

Research Publications

- 1 **J. Trauger** and A. Tewari, “Sequence length independent norm-based generalization bounds for transformers,” in *International Conference on Artificial Intelligence and Statistics*, PMLR, 2024, pp. 1405–1413.
- 2 K. M. Ikegwu, **J. Trauger**, J. McMullin, and R. J. Brunner, “Pyif: A fast and light weight implementation to estimate bivariate transfer entropy for big data,” in *2020 SoutheastCon*, IEEE, 2020, pp. 1–6.

Employment History

- 2020 – 2021 **Data Science Engineer: Simspace Corporation**
Responsibilities included designing and implementing code to support machine learning projects. I also helped in the interview process with designing questions and assessing candidates for software engineering positions.
- 2020 **Data Science and Machine Learning Infrastructure Researcher: Gies College of Business’ Data Science Research Service**
Used Microsoft Azure to support other employees with their computational needs. I also helped with the data science and machine learning needs of Gies College of Business’ students, faculty, and staff.
- 2017-2020 **Researcher: Laboratory for Computation, Data, and Machine Learning**
Worked under Professor Robert J. Brunner and his research group. I contributed to the group’s projects in data science and machine learning as well as helped manage instances on the Nebula cluster ran by the National Center for Supercomputing Applications.
- Summer 2018 **Software Engineer Intern: Northrup Grumman**
I wrote code for automated testing, maintained existing code, and helped create and update documentation for various systems.

Teaching Assistantships

- WN23, FA23, WN24 **STATS 315: Statistics and Artificial Intelligence**
Won honorable mention for best TA team in the department in 2022-2023 year.
- WN22, FA22 **STATS 280: Honors Introduction to Statistics**
- FA21 **STATS 250: Introduction to Statistics**
- FA17 **CS 199: Applied Cloud Computing**