

# Jayde Homer

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## Data Analyst Skills

**Communication:** presentations and reports • dashboard design (Shiny, Tableau) • literate programming (R markdown, Quarto) • data visualization (Plotly, ggplot2, Excel) • website management • peer reviewer (journal, book chapter, conference)

**Programming Languages:** R (tidyverse) • Python 3 • SQL

**Software Development:** operating systems (MacOS, Windows) • computing environments (RStudio, JupyterLab) • experiment user interface (PsychoPy, Qualtrics) • source control (Git, Github, GNU make)

**Statistics:** machine learning (PyTorch, natural language processing) • data analysis • predictive modeling • quantitative description • Monte Carlo simulation • experimental design • survey methodology • Bayesian analysis (brms, rstan) • structural equation modeling • mixed effects modeling

**Teaching:** learning management systems (Canvas, Blackboard) • assessment design • course design

## Education

2023	<b>PhD, Psychological and Brain Sciences (ABD)</b> Completing dissertation; degree expected Fall 2023 <i>Environmental and Linguistic Influences on Preschoolers' Spellings: A Quantitative Exploration of Bad Spellings</i> Advisor: Prof. Rebecca Treiman Graduate Certificate in Quantitative Analysis	Washington University (WUSTL)
2021	<b>MA, Psychological and Brain Sciences</b> Thesis title: <i>Spelling and Reading Novel Homophones: Testing the Value of Lexical Distinctiveness</i>	WUSTL
2020	<b>MA, Psychological and Brain Sciences</b> Advisor: Dr. Rebecca Treiman	WUSTL
2016	<b>BA, Linguistics</b>	University of Rochester
2016	<b>BS, Brain and Cognitive Science</b> Thesis title: <i>Words in Isolation: An Analysis and Comparison of the SEEDLingS Corpus</i> Advisor: Dr. Erika Bergelson	University of Rochester

## Experience

2022-06 – present	<b>Data Fellow</b> St. Louis, MO <ul style="list-style-type: none"><li>Advised diverse stakeholders on technology acquisition, use, and issue resolutions by communicating findings and evidence-based action items</li><li>Designed research study to examine student/instructor interaction styles in social annotation settings using natural language processing and machine learning</li><li>Created parameterized reporting system for understanding student and instructor use of university-licensed educational technologies (e.g., Hypothesis, Annoto, Kaltura, Gradescope, Canvas)</li></ul>	WUSTL Center for Teaching and Learning
2019-08 – present	<b>Graduate Student Researcher</b> St. Louis, MO <ul style="list-style-type: none"><li>Trained, supervised, and advised 3 undergraduate students on their year-long honors theses, culminating in final paper and presentation</li><li>Provided written and verbal feedback on lab member projects, manuscripts, and grant submissions</li></ul>	WUSTL
2020-05 – present	<b>Private Tutor</b> Remote, Chicago, IL <ul style="list-style-type: none"><li>Tutored 500+ hours in R, statistics, and academic writing with undergraduate, Masters, and PhD students, professionals, and lifelong learners</li></ul>	Wyant
2021-07 – 2021-08	<b>Instructor</b> St. Louis, MO <ul style="list-style-type: none"><li>Designed and developed online, hybrid 5-week Developmental Psychology course</li><li>Created assessments to measure students' achievement of course objectives</li><li>Prepared students for success on assignments and exams with well-delivered lectures that incorporated active learning strategies</li></ul>	WUSTL

- 2019-08 – **Assistant to the Instructor** WUSTL  
2022-05  
St. Louis, MO
- Assisted instructors with grading, teaching, and classroom administrative duties (e.g., maintaining learning management system(s), preparing materials)
  - Awarded Psychological and Brain Sciences “Assistant to the Instructor of the Year” Award in 2022
  - Courses: Graduate Quantitative Methods; Introductory Psychological Statistics; Experimental Psychology; History of Psychology; Psychology of Language; Developmental Psychology; Psychology of Learning
- 2020-05 – **Consultant** Tools of the Mind  
2022-08  
Remote, Denver, CO
- Developed preschool and kindergarten spelling assessments
- 2016-09 – **Literacy Tutor** AmeriCorps  
2017-06  
South Bend, IN
- Tutored and mentored K-2 students in reading, writing, and spelling during after-school Boys & Girls Club (300 hours)
- 2016-06 – **Lab Manager** University of Notre Dame  
2018-07  
South Bend, IN
- Maintained lab software and hardware including 9 computers, 2 infant experiment booths, and eye-tracking video systems
  - Developed R scripts to streamline data cleaning and analyses
  - Coordinated data collection for up to 5 studies at a time, recruited infants and families, maintained participant database, and ran experiments
  - Managed up to 10 undergraduate research assistants and mentored the completion of 4 independent research projects
- 2015-02 – **Undergraduate Research Assistant** University of Rochester  
2016-05  
Rochester, NY
- Assisted with data collection: in-lab eyetracking experiments and home visits to set up video and audio recording equipment
  - Annotated audio and video recordings from infants’ home language environments
- 2014-09 – **Undergraduate Teaching Assistant** University of Rochester  
2014-12  
Rochester, NY
- Graded assignments and exams; held office hours and study sessions for Introduction to Linguistic Analysis

## Professional Activities and Service

- 2023-05 – **Student** LaunchCode  
present  
St. Louis, MO
- Studying SQL database use and administration from a practicing professional
- 2021-09 – **Member** Office for Student Success, WUSTL Graduate Student Resource Corps  
2021-12  
St. Louis, MO
- Provided free statistics tutoring, mentorship, and study groups for students who were first-generation or from limited socioeconomic backgrounds
- 2021-08 – **Graduate Student Representative** WUSTL Center for Teaching and Learning, Graduate Student Advisory  
2023-05  
Council  
St. Louis, MO
- Communicated graduate student teaching related issues to administrators with team of 11 other council members from various disciplines
  - Organized and moderated panels for graduate students: “Claiming authority in the classroom while remaining approachable” (2022-10) and “Leveraging teaching skills in non-academic careers” (2022-02)

- 2021-03 – 2023-05      **Professional Development in Teaching**      WUSTL Center for Teaching and Learning  
St. Louis, MO
- Scholarship of Teaching and Learning Seminar
  - Summer Course Design Institute
  - EPIC Learning Community
  - Constructing Effective Collaborative Learning Opportunities
  - Facilitating Effective Discussions
- 2019-08 – 2020-07      **Member**      Psychology Graduate Student Association’s Social Committee  
St. Louis, MO
- Coordinated department happy hours, annual picnic, and managed budget and funds
- 2019-08 – 2020-07      **Peer Mentor**      WUSTL Psychological and Brain Sciences Graduate Student Peer Mentor Program  
St. Louis, MO
- Advised first-year graduate student during their transition into graduate school
- 2019-06 – 2019-06      **Demonstration Leader**      WUSTL College Prep Program  
St. Louis, MO
- Demonstrated spelling experiment, communicated basics of hypothesis testing, and offered opportunities to engage with reading science for first-generation high school scholars
- 2019-04 – 2022-05      **Reviewer**  
St. Louis, MO
- Siegler, “How Children Develop” select chapters: 2022-05
  - Reading and Writing: 2020-08, 2022-07
  - APS Student Caucus RiSE Award: 2020-04
  - APS Student Caucus Student Grant Competition: 2019-12
  - APS Student Research Award: 2019-04
- 2019-01 – 2021-05      **Founding Member and Webmaster**      WUSTL Psychology Graduate Student Association’s Social Media Committee  
St. Louis, MO
- Created and maintained website
  - Prepared clear instructions and documentation and trained next cohort to maintain the website
- 2019-01 – 2019-07      **Member**      WUSTL Psychology Graduate Student Association’s Diversity Committee  
St. Louis, MO
- Coordinated events to promote and educate graduate students on diversity, equity, and inclusion issues
- 2018-10 – 2018-10      **Volunteer**      EarthDance Organic Farm School  
Ferguson, MO
- Performed general farm maintenance, planted, weeded, and harvested vegetables at farm that feeds local community
- 2018-09 – 2018-11      **Project Management Certification Program**      University of Notre Dame, Office of Human Resources  
South Bend, IN
- Learned management frameworks (e.g., scrum, kanban)
- 2018-09 – present      **Workshop Participant**  
St. Louis, MO
- Data for Good: Driving Prosperity in the St. Louis Region, hosted by WUSTL Olin Center for Analytics and Business Insights
  - Introduction to Structural Equation Modeling, Curran & Bauer
  - Career Development: Exploring Non-Academic Careers, WUSTL Career Center
  - Scientific Writing for Psychology, Prof. Robert Kail
  - WUSTL Arts & Sciences Summer Course Design
- 2018-08 – present      **Current Member**      Professional Organizations
- The Society for the Scientific Study of Reading
  - American Psychological Association
  - The Reading League

2016-09 –  
2018-07

**Volunteer**  
South Bend, IN

Pet Refuge, Inc.

- Volunteered one 5-hour shift per week and added more shifts when possible
- Performed kennel duties such as cleaning and feeding, coordinated with team members to ensure safety and wellbeing of adoptable pets, and walked dogs to provide daily exercise and training opportunities to enhance adoptability

## Publications

1. Homer, J., Treiman, R., & Farry-Thorn, M. (2023). *Three facets of spelling* (C. McBride, Y. Ye, T. Inoue, & M. U., Eds.). Routledge.
2. Homer, J., Thompson, A., & Lany, J. (n.d.). *The home language environment predicts individual differences in lexical recognition at 9 months of age*.
3. Homer, J., Hensley, K., & Treiman, R. (n.d.). *Reading and spelling homophones*.

## Presentations

Note: \* denotes conference talks and † denotes poster presentation

1. \*Homer, J., Kessler, B., & Treiman, R. (2023). *Making sense of nonsense: How u.s. Preschoolers' spellings reflect their own names, letter names, and phonological segmentation*. Society for the Scientific Study of Reading (August; Port Douglas, QLD, Australia).
2. †Homer, J. (2023). *Making sense of nonsense: Influences on preschoolers' spellings*. Graduate Student Senate's Graduate Research Symposium (April; St. Louis, MO).
3. \*Homer, J., Thompson, A., & Lany, J. (2020). *Predicting lexical processing efficiency at 9 months from the home language environment: Child-directed vs. Ambient speech*. Many Paths to Language; Max Planck Institute for Psycholinguistics (October; The Netherlands).
4. †Homer, J., & Treiman, R. (2020). *Spelling and reading novel homophones*. Society for the Scientific Study of Reading (July; Newport Beach, CA).