

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	PhD, Psychological and Brain Sciences (ABD) 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)
2020	MA, Psychological and Brain Sciences Thesis title: <i>Spelling and Reading Novel Homophones: Testing the Value of Lexical Distinctiveness</i> Advisor: Dr. Rebecca Treiman	WUSTL
2016	BA, Linguistics	University of Rochester
2016	BS, Brain and Cognitive Science 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	Data Fellow St. Louis, MO <ul style="list-style-type: none">Advised diverse stakeholders on technology acquisition, use, and issue resolutions by communicating findings and evidence-based action itemsDesigned research study to examine student/instructor interaction styles in social annotation settings using natural language processing and machine learningCreated parameterized reporting system for understanding student and instructor use of university-licensed educational technologies (e.g., Hypothesis, Annoto, Kaltura, Gradescope, Canvas)	WUSTL Center for Teaching and Learning
2019-08 – present	Graduate Student Researcher St. Louis, MO <ul style="list-style-type: none">Trained, supervised, and advised 3 undergraduate students on their year-long honors theses, culminating in final paper and presentationProvided written and verbal feedback on lab member projects, manuscripts, and grant submissions	WUSTL
2020-05 – present	Private Tutor Remote, Chicago, IL <ul style="list-style-type: none">Tutored 500+ hours in R, statistics, and academic writing with undergraduate, Masters, and PhD students, professionals, and lifelong learners	Wyzant
2021-07 – 2021-08	Instructor St. Louis, MO <ul style="list-style-type: none">Designed and developed online, hybrid 5-week Developmental Psychology courseCreated assessments to measure students' achievement of course objectivesPrepared students for success on assignments and exams with well-delivered lectures that incorporated active learning strategies	WUSTL

2019-08 – 2022-05	Assistant to the Instructor St. Louis, MO	WUSTL
	<ul style="list-style-type: none"> 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 – 2022-08	Consultant Remote, Denver, CO	Tools of the Mind
	<ul style="list-style-type: none"> Developed preschool and kindergarten spelling assessments 	
2016-09 – 2017-06	Literacy Tutor South Bend, IN	AmeriCorps
	<ul style="list-style-type: none"> Tutored and mentored K–2 students in reading, writing, and spelling during after-school Boys & Girls Club (300 hours) 	
2016-06 – 2018-07	Lab Manager South Bend, IN	University of Notre Dame
	<ul style="list-style-type: none"> 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 – 2016-05	Undergraduate Research Assistant Rochester, NY	University of Rochester
	<ul style="list-style-type: none"> 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 – 2014-12	Undergraduate Teaching Assistant Rochester, NY	University of Rochester
	<ul style="list-style-type: none"> Graded assignments and exams; held office hours and study sessions for Introduction to Linguistic Analysis 	

Professional Activities and Service

2023-05 – present	Student St. Louis, MO	LaunchCode
	<ul style="list-style-type: none"> Studying SQL database use and administration from a practicing professional 	
2021-09 – 2021-12	Member St. Louis, MO	Office for Student Success, WUSTL Graduate Student Resource Corps
	<ul style="list-style-type: none"> Provided free statistics tutoring, mentorship, and study groups for students who were first-generation or from limited socioeconomic backgrounds 	
2021-08 – 2023-05	Graduate Student Representative St. Louis, MO	WUSTL Center for Teaching and Learning, Graduate Student Advisory Council
	<ul style="list-style-type: none"> 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 St. Louis, MO	WUSTL Center for Teaching and Learning
	<ul style="list-style-type: none"> • 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 St. Louis, MO	Psychology Graduate Student Association's Social Committee
	<ul style="list-style-type: none"> • Coordinated department happy hours, annual picnic, and managed budget and funds 	
2019-08 – 2020-07	Peer Mentor St. Louis, MO	WUSTL Psychological and Brain Sciences Graduate Student Peer Mentor Program
	<ul style="list-style-type: none"> • Advised first-year graduate student during their transition into graduate school 	
2019-06 – 2019-06	Demonstration Leader St. Louis, MO	WUSTL College Prep Program
	<ul style="list-style-type: none"> • 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	
	<ul style="list-style-type: none"> • 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 St. Louis, MO	WUSTL Psychology Graduate Student Association's Social Media Committee
	<ul style="list-style-type: none"> • Created and maintained website • Prepared clear instructions and documentation and trained next cohort to maintain the website 	
2019-01 – 2019-07	Member St. Louis, MO	WUSTL Psychology Graduate Student Association's Diversity Committee
	<ul style="list-style-type: none"> • Coordinated events to promote and educate graduate students on diversity, equity, and inclusion issues 	
2018-10 – 2018-10	Volunteer Ferguson, MO	EarthDance Organic Farm School
	<ul style="list-style-type: none"> • Performed general farm maintenance, planted, weeded, and harvested vegetables at farm that feeds local community 	
2018-09 – 2018-11	Project Management Certification Program South Bend, IN	University of Notre Dame, Office of Human Resources
	<ul style="list-style-type: none"> • Learned management frameworks (e.g., scrum, kanban) 	
2018-09 – present	Workshop Participant St. Louis, MO	
	<ul style="list-style-type: none"> • 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
	<ul style="list-style-type: none"> • 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.
2. †Homer, J. (2023). *Making sense of nonsense: Influences on preschoolers' spellings*. Graduate Student Senate's Graduate Research Symposium.
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.
4. †Homer, J., & Treiman, R. (2020). *Spelling and reading novel homophones*. Society for the Scientific Study of Reading.