

SHIRLEY DUONG, M.S.

shirleyduong5@gmail.com | 626-371-6872 | Pittsburgh, PA

SKILLS

- Programming: R, STATA, Ruby, HTML, Python, SQL, Javascript, MATLAB
- Data Visualization: Tableau, ArcGI, ggplot2, Seaborn
- Task Development and Coding: Qualtrics, Datavyu, Nvivo, PsychoPy
- Art: Adobe Creative Suite, pie baking and decoration

WORK EXPERIENCE

Graduate Student Researcher 07/2018-Present
University of Pittsburgh, Learning Research and Development Center Pittsburgh, PA

- Direct 5 projects examining social and cognitive factors related to children's early math cognition and learning in the home
- Develop, implement, and train 15+ research assistants to apply various coding schemes to observational data in to capture the quality and sequential nature of dyadic language input
- Conduct temporal- and micro-analysis of observational and text data with linear and logistic mixed effects models, non-linear dynamical analysis with recurrence quantification, and data dimensionality reduction with cluster analysis
- Lead workshops, talks, and meetings on current research findings, statistical methods, and coding, e.g., extracting information from databases with, applying *k*-means cluster analysis, data visualization with ggplot, etc.
- Mentor research on early math and language learning, primarily with undergraduate students completing honors theses and full-time research staff completing independent projects
- Published in: *Journal of Experimental Child Psychology* (2021), *Brain and Behavioral Sciences* (2021), *Frontiers in Education* (2020), *Developmental Psychology* (2019), *Elemente der Mathematik* (2019)
- **Awards:** National Science Foundation Graduate Research Fellowship (2019-2022), Learning Research and Development Center Graduate Student Award (2021)

Programming Consultant 05/2022-Present
Purdue University Remote

- Modify, test, and debug code of a cognitive assessment battery

Statistical Analysis Consultant 01/2022-04/2022
Naissance Partners Remote

- Analyze datasets from financial services' email campaigns to inform strategies for increasing email engagement
- Execute data cleaning, outlier detection, power analyses, and visualizations
- Conduct descriptive and inferential statistical analyses, including correlations, group comparisons, regression with feature selection (e.g., LASSO)

Research Consultant (Various clients, remote) 12/2021-Present

- Provided consultation on inter-rater reliability calculations of behavioral coding schemes, including kappa statistics and intra-class correlation coefficients
- Developed and implemented a qualitative coding scheme capturing themes in qualitative interviews

Teaching Fellow 08/2021-05/2022
University of Pittsburgh, Department of Psychology Pittsburgh, PA

- Courses: Research Methods in Psychology Lab (Fall 2021), Cognitive Psychology Lab (Spring 2022)
- Exercise inclusive, student-centered instruction on research methods, data analysis and visualization, and scientific writing
- Prepare and deliver lectures, facilitate discussion, and provide feedback on student research papers

EDUCATION

University of Pittsburgh, Cognitive Psychology, Ph.D. Expected 2023
Certificate, Center for the Neural Basis of Cognition

University of New Haven, Psychology, B.A. (Mathematics Minor) 05/2017

RELEVANT COURSES

Machine Learning, Data Science for Psychology and Neuroscience, Data Visualization, Mixed Effects Models, Parallel Distributed Processing

SERVICE

Psychology Equity, Inclusion, and Community Committee (PEIC), University of Pittsburgh

Co-leader of PEIC and member of the undergraduate subcommittee which plans and executes events to promote undergraduate involvement in the psychological sciences