

Gwenyth Portillo Wightman

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EDUCATION

- Johns Hopkins University, PhD in Computer Science** Fall 2021 - Present
- Advised by Dr. Mark Dredze at the Center for Language and Speech Processing
 - Fellowship: Whiting School of Engineering Dean's Fellowship
 - Selected Coursework: Machine Learning, Human-Computer Interaction
- University of Southern California, B.A. in Cognitive Science** Fall 2015 - Fall 2019
- Minors in Computer Science and Italian
 - Honors: *Summa Cum Laude* (GPA: 3.95/4.0)
 - Selected Coursework: Artificial Intelligence, Artificial Intelligence for Social Good, Advanced Big Data Methods (Graduate course), Human Language as Computation, Human Language and Technology, Robotics
- Institute for the International Education of Students, Milan, Italy** Fall 2019
Study Abroad
- Phoenix College, Phoenix, AZ** Spring 2020 - Fall 2020
- Glendale Community College, Glendale, AZ** Summer 2020 - Fall 2020

EXPERIENCE

- Head Research Assistant, USC Computational Social Science Lab** July 2017 - August 2021
- Coordinate the lab's team of 10-15 research assistants, including training new research assistants, assigning tasks, and organizing meetings.
 - Lead annotation projects with text data sets of up to 35,000 items for morality, hate speech and crime, and other linguistic markers.
 - Calculate inter-annotator agreement and preprocess data for NLP and ML models.
 - Conduct literature searches to prepare graduate students to develop new projects.
- Course Producer, USC Department of Computer Science** May 2018 - May 2019
- Course Producer for two courses, CSCI 102: Fundamentals of Programming and CSCI 104: Data Structures and Object Oriented Design.
 - Conducted weekly office hours and led labs to help students debug their assignments and review course topics.
 - Graded weekly homework assignments and exams and provided feedback to students.
- Research Assistant, USC Values, Ideology, and Morality Lab** January 2017 - January 2018
- Designed human-subjects surveys with Qualtrics to examine morality.
 - Analyzed survey data using R, Excel, and text analysis techniques.
- Research Assistant, USC Language Processing Lab** April 2017 - August 2017
- Developed and conducted human-subjects experiments to investigate hypotheses through psychological questionnaires, making use of Qualtrics and Amazon Mechanical Turk.
 - Explored corpora to identify instances of certain semantic phenomena related to sensory experience for further research.
 - Constructed detailed coding guidelines for future researchers to use.
 - Contributed to stimulus construction and Qualtrics survey set-up for the paper "Subjectivity across the senses: Adjective interpretation based on sight, smell and taste," authored by Elsi Kaiser and presented at *The 44th Annual Meeting of the Berkeley Linguistics Society (BLS44)* in 2018.

PUBLICATIONS

- Hoover, J., Atari, M., Mostafazadeh Davani, A. et al. Investigating the role of group-based morality in extreme behavioral expressions of prejudice. *Nat Commun* 12, 4585 (2021). <https://doi.org/10.1038/s41467-021-24786-2>

- Hoover, J., Portillo-Wightman, G.*, Yeh, L.*, Havaldar, S., Mostafazadeh Davani, A., Lin, Y., Kennedy, B., Atari, M., Kamel, Z.**, Mendlen, M.**, Moreno, G.**, Park, C.**, Chang, T. E.***, Chin, J.***, Leong, C.***, Leung, J. Y.***, Mirinjian, A.***, & Dehghani, M. (2020). Moral Foundations Twitter Corpus: A collection of 35k tweets annotated for moral sentiment. *Social Psychological & Personality Science*.

UNDER REVISION:

- Kennedy, B., Atari, M., Mostafazadeh Davani, A., Yeh, L., Omrani, A., Kim, Y., Coombs, K., Jr., Havaldar, S., Portillo-Wightman, G., Gonzalez, E., Hoover, J., Azatian, A., Hussain, A., Lara, A., Cardenas, G., Omary, A., Park, C., Wang, X., Wijaya, C., Zhang, Y., Meyerowitz, B., & Dehghani, M. (under revision at *Language Resources and Evaluation*). The Gab Hate Corpus: A collection of 27k posts annotated for hate speech. <https://doi.org/10.31234/osf.io/hqjxn>

PROCEEDINGS

- Mostafazadeh Davani, A., Yeh, L., Atari, M., Kennedy, B., Portillo-Wightman, G., Gonzalez, E., Delong, N., Bhatia, R., Mirinjian, A., Xiang, R. & Dehghani, M. (2019). Reporting the Unreported: Event Extraction for Analyzing the Local Representation of Hate Crimes. In *The Proceedings of Empirical Methods in Natural Language Processing (EMNLP)*, Hong Kong, China.
- Portillo-Wightman, G., Chokolak, C., Roberts, G., & Wang, V. (2019). Predicting the county-level prevalence of Chlamydia in the United States. *The 2019 IEEE MIT Undergraduate Research Technology Conference (URTC)*, Cambridge, MA.
- Kaiser, E., Wang, C., & Portillo-Wightman, G. (2018). Sensory effects on perspective shifting: An experimental investigation of visual, olfactory and gustatory perception in fictional narrative. *The 2018 Conference Once upon a time... Semantic approaches to fiction, literature, and narrative (FICTION2018)*, Groningen, Netherlands.
- Lin, Y., Hoover, J., Portillo-Wightman, G., Park, C., Dehghani, M., & Ji, H. (2018). Acquiring Background Knowledge to Improve Moral Value Prediction. *The 2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM2018)*, Barcelona, Spain.
- Kaiser, E., Wang, C., & Portillo-Wightman, G. (2018). Consequences of sensory modality for the semantics of subjective adjectives: Comparing sight, smell and taste. *The 2018 Conference on Filling Gaps, Building Bridges: Qualitative and Quantitative Approaches to the Study of Literature*, Padova, Italy.

PROJECTS

- **Using machine learning to predict the county-level prevalence of Chlamydia in the United States:** A spatio-temporal predictive modeling task to determine future rates of Chlamydia at the county level and an optimization problem to determine where clinics should be added to improve access to treatment services. Involves high-dimensional and missing data, feature selection, and feature engineering. Implemented in Python using Scikit-learn, Matplotlib, SciPy, Pandas, and Numpy. Presented at the *2019 IEEE MIT Undergraduate Research Technology Conference* in Cambridge, MA.
- **StockOverflow:** A web-based stock investment simulation game where users can follow stocks of their choosing, visualize real-time price changes in stocks across the market using graphs, and make investments with fake money while competing with other users. Uses responsive web design, PHP, SQL, and Bootstrap.

SKILLS

- Languages: Python, R, C++, Java.
- Data Science: Python (Scikit-learn, Pandas), Machine Learning.
- Tools: HTML5, CSS, MySQL, Figma. Familiar: Javascript.

HONORS AND SCHOLARSHIPS

- JHU Whiting School of Engineering Dean's Fellowship
- Omega Psi Cognitive Science Honors Society
- Gamma Kappa Alpha National Italian Honor Society
- University of Southern California Dean's List, Fall 2015 - Spring 2019

- Henry A. Miller Language Scholarship, 2017, 2018, 2019
- Royal Marks Endowed Scholarship, 2016
- USC Dornsife Supporter Scholarship, 2016