Curriculum Vitae
Shreya Havaldar

shreyah@seas.upenn.edu | Philadelphia, PA | *shreyahavaldar.com*

EDUCATION

University of Pennsylvania   August 2021 - May 2026 (anticipated)
PhD Computer and Information Science
Advisors: Lyle Ungar, Eric Wong

University of Southern California   August 2017 - May 2021
B.S. Computer Science
B.S. Applied & Computational Mathematics
Advisor: Morteza Dehghani

RESEARCH STATEMENT

I specialize in culturally-aware multilingual NLP, analyzing how culture influences linguistic styles (emotion, politeness, etc.), creating explanation methods to derive cultural insight from black-box models, and mitigating Anglocentric bias in modern LMs. Currently, I am working on (1) quantifying & explaining how translation fails to preserve style, (2) psychologically grounded metrics for dialog system evaluation, and (3) measuring regional variation in culture both within the US and globally.

AWARDS & HONORS

NSF Graduate Research Fellowship (2023)
Best Paper Award at WASSA @ ACL (2023)
Summa Cum Laude (2021)
USC Computer Science Outstanding Student Award (2021)
USC Computer Science Outstanding Service Award (2021)
Cisco Engineering Excellence Scholarship ($5,000/year)
USC Presidential Scholarship (~$30,000/year)
National Merit Scholarship ($1,000/year)
Brittingham Social Enterprise Lab Scholar (2020)
Grace Hopper Research Scholar (2018, 2019)

PREPRINTS *(* indicates equal contribution)*

Havaldar, S.*, You, W.*, Ungar, L., Wong, E,. (2023). Visual Topics via Visual Vocabularies. *Under Review.*

Giorgi, S., **Havaldar, S.,** Ahmed, F., Akhtar, Z., Vaidya, S., Pan, G., Ungar, L., Schwartz, H. A., & Sedoc, J. (2023). Human-Centered Metrics for Dialog System Evaluation. *Under Review.*

Havaldar, S., Giorgi, S., Talhelm, T., Guntuku, S. C., & Ungar, L. (2023). Building Knowledge-Guided Lexica to Model Cultural Variation. *Under Review.*

PUBLICATIONS *(* indicates equal contribution)*

Havaldar, S., Pressimone, M., Wong, E., Ungar, L. (2023). Comparing Styles across Languages. *To appear in EMNLP.*

Havaldar, S., Rai, S., Singhal, B., Liu, L., Guntuku, S. C., & Ungar, L. (2023). Multilingual Language Models are not Multicultural: A Case Study in Emotion. *WASSA @ ACL.* ***Best Paper Award.***

Lyu, Q.*, **Havaldar, S.***, Stein, A.*, Zhang, L., Rao, D., Wong, E., Apidianaki, M., & Callison-Burch, C. (2023). Faithful Chain-of-Thought Reasoning. *To appear in AACL.*

Havaldar, S., Stein, A., Wong, E., & Ungar, L. (2023). TopEx: Topic-based Explanations for Model Comparison. *ICLR (Tiny Papers Track).*

Aggarwal, A., Rai, S., Giorgi, S., **Havaldar, S.**, Sherman, G., Mittal, J., & Guntuku, S. C. (2023). A Cross-Modal Study of Pain Across Communities in the United States. *ACM Web Conference (Companion Proceedings).*

Stade, E. C., Ungar, L., **Havaldar, S.**, & Ruscio A. M. (2023). Perseverative Thinking is Associated with Features of Spoken Language. *Behavior Research and Therapy.*

Mostafazadeh Davani, A., Atari, M., Kennedy, B., **Havaldar, S.**, & Dehghani, M. (2020). Hatred is in the Eye of the Annotator: Hate Speech Classifiers Learn Human-Like Social Stereotypes. *Proceedings of the 42nd Annual Conference of the Cognitive Science Society.*

Kennedy, B., Atari, M., Mostafazadeh Davani, A., Yeh, L., Omrani, A., Kim, Y., Coombs Jr., K., **Havaldar, S.**, et al. (2020). The Gab Hate Corpus: A Collection of 27k Posts Annotated for Hate Speech. *Language Resources and Evaluation.*

Khaled, M., Corner, G. W., Morris, A., **Havaldar, S.**, Luo, E., Saxbe, D. (2020). Physiological Linkage in Pregnancy: Couples' Cortisol, Negative Conflict Behavior, and Postpartum Depression. *Journal of Biological Psychology*.

Hoover, J., Portillo-Wightman, G., Yeh, L., **Havaldar, S.**, Davani, A. M., et al. (2020). Moral Foundations Twitter Corpus: A Collection of 35k Tweets Annotated for Moral Sentiment. *Social Psychological and Personality Science*.

TEACHING EXPERIENCE

UPenn Department of Computer Science   August 2022 - Present
Teaching Assistant: CS5300 (Computational Linguistics), CS3990 (Mathematics of Machine Learning)
- Assisting with creating/testing curriculum, holding weekly office hours to help students with theoretical understanding and homework assignments

USC Department of Computer Science   Fall 2018 - May 2021
Teaching Assistant: CS170 (Discrete Methods in Computer Science), CS270 (Intro to Algorithms)
- Designed and led weekly discussion sections, held office hours to help students with theoretical understanding and homework assignments

USC Undergraduate Center for AI in Society (CAIS++)   Fall 2019 - May 2021
Curriculum Lead
- Held weekly ML lessons for a cohort of 8 undergraduate students, focused on the fundamentals of applied and theoretical machine learning.

USC Joint Educational Project   Fall 2018 - Spring 2019
Undergraduate Teacher
- Designed and implemented a comprehensive curriculum to teach local LA elementary school students about introductory computer science concepts through MIT's Scratch

WORK EXPERIENCE

Microsoft - MSAI (Bellevue, WA | Remote)   Summer 2020, Summer 2021
Software Engineering & Data Science Intern
- Configured a topic extraction pipeline to include database ingestion in order to include 10,000+ tenant-level features for the Microsoft Search, Assistance, and Intelligence team
- Led research and experimentation for a proposed topic classification model using various supervised learning methods and domain-specific feature selection

Microsoft - Azure Identity (Redmond, WA)   Summer 2019
Software Engineering Intern
- Worked on Microsoft Identity's mid-tier graph-based database system, added functionality to implement link counts and complex link querying capabilities
- Utilized Lucene to query indexed data and Azure Service Fabric to test on a local cluster

LEADERSHIP

Association for the Advancement of Artificial Intelligence   Fall 2017 - Spring 2020
President, Event Coordinator
- Led the AAAI USC student chapter; planned AI-focused workshops, hackathons, and outreach events to encourage USC students from all backgrounds to explore AI
- Developed workshops on perceptrons, neural networks, and computer vision

AthenaHacks   Spring 2019 - May 2021
Logistics Organizer
- Worked on the Logistics committee to plan Southern California's largest all-female hackathon and empower high school/university women in the technology field

Environmental Student Assembly   Fall 2019 - May 2021
Director of Technology
- Redesigned and maintained the ESA website, worked with USC's undergraduate student government to facilitate sustainability on campus
- Assisted with the organization of a campus-wide composting initiative

AAAI Elementary Student Outreach   Spring 2018 - Spring 2019
Program Director
- Worked with Dr. Sheila Tejada to lead AI outreach events for local children during the AAAI-18 and AAAI-19 international conferences

Society of Women Engineers   Fall 2017 - Spring 2019
High School Mentor
- Acted as a year-round mentor to three girls from a Los Angeles high school; provided guidance on standardized tests and the college application process as an engineering major