Curriculum Vitae

Shreya Havaldar

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EDUCATION

University of Pennsylvania August 2021 - May 2026 (anticipated)
PhD Computer and Information Science
Advisor: Lyle Ungar

University of Southern California August 2017 - May 2021
B.S. Computer Science
B.S. Applied & Computational Mathematics
Summa Cum Laude

RESEARCH EXPERIENCE

Word Well Being-Project (UPenn) August 2021 - Present
Advisor: Lyle Ungar

- ***Research Focus:*** Culturally-aware multilingual NLP, with a focus on how culture influences linguistic style and explainability of multilingual models for cultural comparison
- ***Ongoing Work:*** Leading a project investigating the effect of translation on multilingual politeness (joint work with Joao Sedoc, Garrick Sherman); leading a project extending ideal affect analysis to a multilingual setting (joint work with Jeanne Tsai); investigating how the language of emotions differs across European cultures (led by Katie Hoemann)
- ***Relevant Past Work:*** Led a project investigating differences in the language of depression across American communities (joint work with Sharath Guntuku)

Penn NLP Group (UPenn) August 2021 - Present
Advisor: Lyle Ungar

- ***Ongoing Work:*** Co-leading a project on faithful and teachable chain of thought reasoning using GPT-3 (joint work with Veronica Qing Lyu, Adam Stein, Chris Callison-Burch, Mayur Naik)
- ***Relevant Past Work:*** Investigated techniques for automatically detecting boundaries between human and machine generated text (Led by Liam Dugan, joint work with Joseph Cutler, Adam Stein)

Computational Social Science Laboratory (USC) Fall 2018 - Present
Advisor: Morteza Dehghani; Collaborators: Brendan Kennedy, Mohammed Atari, Aida Davani

- ***Research Focus:*** Used NLP techniques on social discourse data to study individual and group morality
- ***Relevant Past Work:*** Led a project exploring the geographic correlation between Tweets related to reproductive rights and female economic equality/sexual liberation, performed explanatory analyses and data preprocessing for the *Moral Foundations Twitter Corpus* and *The Gab Hate Corpus.* Conducted a literature review on annotator reliability and the effect of annotator disagreement.

PUBLICATIONS (with proceedings)

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*.

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*.

Vial., A., Mostafazadeh Davani, A., **Havaldar, S.,** Chestnut, E., Dehghani, M., Cimpian, A. (2020). Syntactic and Semantic Gender Biases in the Language on Children's Television: Evidence from a Corpus of 95 Shows from 1960 to 2018. *Submitted to Proceedings of the National Academy of Sciences (PNAS).*

TEACHING EXPERIENCE

School of Engineering and Applied Science (UPenn) August 2022 - Present
Teaching Assistant: CS5300 (Computational Linguistics)

- Assisting with creating/testing curriculum, holding weekly office hours to help students with theoretical understanding and homework assignments

Department of Computer Science (USC) Fall 2018 - May 2021
Teaching Assistant: CS 170 (Discrete Methods in Computer Science), CS 270 (Introduction to Algorithms)

- Designed and led weekly discussion sections, held office hours to help students with theoretical understanding and homework assignments

Undergraduate Center for AI in Society (CAIS++) Fall 2019 - May 2021
Curriculum Lead

- Taught the incoming CAIS++ cohorts the fundamentals of applied and theoretical machine learning and its social implications

Joint Educational Project Fall 2018 - Spring 2019

- 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 enable use of 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
- Assisted with the development of workshops on perceptrons, neural networks, and computer vision

AthenaHacks Spring 2019 - May 2021

Organizer

- Working 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

- Redesigning and maintaining the ESA website, working with USC's undergraduate student government to facilitate sustainability on campus
- Assisted with organization of campus-wide composting initiative

AAAI Conference Outreach Spring 2018 - Spring 2019

Program Director

- Worked with USC Professor 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

- Acting as a year-round mentor to three girls from an LA high school; provided guidance on standardized tests and the college application process as an engineering major

AWARDS & HONORS

Computer Science Outstanding Student Award (2021)
Computer Science Outstanding Service Award (2021)
USC Presidential Scholarship Recipient (~$30,000/year)
National Merit Scholar ($1,000/year)
Cisco Engineering Excellence Scholarship ($5,000/year)
Brittingham Social Enterprise Lab Scholar (2020)
Grace Hopper Research Scholar (2018, 2019)
NCWIT Aspirations in Computing Scholar (2016, 2017)
USC Engineering Honors Program (2017 - 2021)
Dean's List (2017 - 2021)