## Victoria Lin

PERSONAL INFORMATION	Phone: Email: Citizenship:	+1 (408) 318-4905 victoria@stat.cmu.edu United States, Canada		Website Google Scholar	
EDUCATION	Carnegie Mellon University Ph.D., Statistics and Machine Learning Advisors: Louis-Philippe Morency and Eli Ben-Michael		Aug 2020 - May 2026 (expected)		
	Carnegie Mellon University M.S., Statistics			2020 - 2021	
	Carnegie Mellon University M.S., Computational Data Science			2018 - 2020	
	Harvard Un A.B. (cum la	niversity ude), Statistics and Molecu	lar & Cellular Biology	2013 - 2017	
Awards	Meta Researc	h PhD Fellowship		2023 - 2025	
	Two Sigma D	Diversity PhD Fellowship Fi	nalist	2023	
	Best Paper Award Nominee, ICMI 2020 2020				
	Best Paper Award, AffCon Workshop at AAAI 2020 2020				
	Research Fellowship, Harvard College Program for Research in Science and Engineering 2016				
	Research Gra	nt, Harvard College Pechet	Family Research Fund	2016	
Experience	Carnegie Mellon University  Graduate Research Assistant (Advisors: Louis-Philippe Morency and Eli Ben-Michael)  I work on "causal NLP," or causal inference for natural language data and language models. Some				
	technical problems I find interesting include using causal principles to improve language models, learning causal effects from high-dimensional unstructured data like language, and learning language representations for valid causal inference.				
	Previously, I worked on affective computing and multimodal machine learning (with LP Morency and Jeffrey Girard) and mental health applications of causal inference (with Edward Kennedy).				
		tesearch Cambridge ern (Host: Javier González)		2025	
	Microsoft Research Redmond & Microsoft Experiences+Devices  JEM Research Intern (Hosts: Srinagesh Sharma and Dimitrios Dimitriadis)				
	Harvard School of Public Health Research Assistant (Advisor: Miguel Hernán)			2017 - 2018	
		tute of MIT and Harvai istant (Advisor: Steven Mc		2016 - 2017	

## **PUBLICATIONS**

\* denotes equal contribution

PEER-REVIEWED PUBLICATIONS

Victoria Lin, Louis-Philippe Morency, Eli Ben-Michael. "Isolated Causal Effects of Natural Language." [PDF, code] ICML 2025.

**Victoria Lin**, Eli Ben-Michael, Louis-Philippe Morency. "Optimizing Language Models for Human Preferences is a Causal Inference Problem." [PDF, code] *UAI 2024*.

Victoria Lin, Louis-Philippe Morency, Eli Ben-Michael. "TEXT-TRANSPORT: Toward Learning Causal Effects of Natural Language." [PDF, code] EMNLP 2023.

Victoria Lin, Louis-Philippe Morency, Dimitrios Dimitriadis, Srinagesh Sharma. "Counterfactual Augmentation for Multimodal Learning Under Presentation Bias." [PDF, code] EMNLP Findings 2023.

Victoria Lin, Louis-Philippe Morency. "SENTECON: Leveraging Lexicons to Learn Human-Interpretable Language Representations." [PDF, code]

ACL Findings 2023.

Aneesha Sampath, **Victoria Lin**, Louis-Philippe Morency. "SEEDBERT: Recovering Annotator Rating Distributions from an Aggregated Label." [PDF] *UDM Workshop at AAAI 2023*.

Victoria Lin\*, Jeffrey Girard\*, Michael Sayette, Louis-Philippe Morency. "Toward Multimodal Modeling of Emotional Expressiveness." [PDF, code] ICMI 2020. Nominated for Best Paper Award.

Sean McGrath\*, **Victoria Lin**\*, Zilu Zhang, Lucia Petito, Roger Logan, Miguel Hernán, Jessica Young. "gfoRmula: An R Package for Estimating the Effects of Sustained Treatment Strategies via the Parametric g-formula." [PDF, code] *Patterns* 1(3), 100008.

Victoria Lin, Jeffrey Girard, Louis-Philippe Morency. "Context-Dependent Models for Predicting and Characterizing Facial Expressiveness." [PDF]

AffCon Workshop at AAAI 2020. Best Paper Award.

Leslie Tong, Seo Yeon Yoon, Yaisa Andrews-Zwilling, Alyssa Yang, **Victoria Lin**, Hanci Lei, Yadong Huang. "Enhancing GABA Signaling during Middle Adulthood Prevents Age-Dependent GABAergic Interneuron Decline and Learning and Memory Deficits in ApoE4 Mice." [PDF] *Journal of Neuroscience* 36(7), 2316-2322.

SOFTWARE LIBRARIES

sentecon (3,400+ downloads): Python library for interpretable language representations. gfoRmula (38,000+ downloads): R package for causal effect estimation with the g-formula.

Presentations Invi

Invited Talks

Carnegie Mellon University DeGroot Research Workshop

Counterfactual Augmentation for Learning Under Presentation Bias.

2023

	Contributed Talks	
	American Causal Inference Conference (ACIC)  Isolated Causal Effects of Natural Language.	
	American Causal Inference Conference (ACIC) Generalizing Text Experiments to Real-World Contexts with Large Language Models.	2023
	International Conference on Multimodal Interaction (ICMI) Toward Multimodal Modeling of Emotional Expressiveness.	2020
	AffCon Workshop at the AAAI Conference on Artificial Intelligence Context-Dependent Models for Predicting and Characterizing Facial Expressiveness.	2020
REVIEWING	UAI (2025), ACL (2023), EMNLP (2022, 2023)	
TEACHING	Carnegie Mellon University Graduate Teaching Assistant 36-402 Advanced Methods for Data Analysis 36-468 Text Analysis 36-462 Methods of Statistical Learning 36-309 Experimental Design for Behavioral & Social Sciences 36-401 Modern Regression 11-631 Data Science Seminar (also as guest lecturer)	Spring 2023 Fall 2022 Spring 2022 Fall 2021 Fall 2020 Fall 2019
	Harvard University Undergraduate Teaching Fellow CS109A Data Science	Fall 2016

Aneesha Sampath (CMU B.S.  $\rightarrow$  University of Michigan Ph.D.)

Mentorship

 ${\rm Skills}$