

Eva Portelance

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pronouns: she/they - elle

ACADEMIC BACKGROUND	<i>Ph.D. in Computational Linguistics</i>	2017-2022
	Stanford University, Stanford, California	
	<ul style="list-style-type: none">• Ph.D. research on neural network approaches to natural language processing and cognitive science. Co-advised by professor Dan Jurafsky and professor Michael C. Frank.	
	<i>Dissertation title:</i> Neural Network Approaches to the Study of Word Learning.	
	<i>B.A. (Hons.) in Linguistics, Computer Science (minor)</i>	2014 - 2017
	McGill University, Montreal, Quebec	
	<i>D.E.C. in Textile Design</i>	2010 - 2013
	CÉGEP du Vieux Montréal, Montreal, Quebec	
	<i>Workshops and summer schools</i>	
	<ul style="list-style-type: none">• Workshop on Computational Grammar Induction, McGill University	2019
	<ul style="list-style-type: none">• Diverse Intelligences Summer Institute, St. Andrews University	2018
RESEARCH RELATED EMPLOYMENT	<i>Postdoctoral Fellow</i>	2023 - present
	Linguistics, McGill University / Mila - Québec Artificial Intelligence Institute	
	<ul style="list-style-type: none">• Postdoctoral researcher under the supervision of Professors Timothy J. O'Donnell and Siva Reddy. Member of the Montréal Computational and Quantitative Linguistics Laboratory (MCQLL) and the McGill NLP group.	
	<ul style="list-style-type: none">• Researching and helping supervise students studying how to develop natural language understanding in neural networks.	
	<i>Research Assistant</i>	2019 - 2022
	The Stanford Natural Language Processing Group	
	<ul style="list-style-type: none">• Research group headed by Professors Chris Manning, Dan Jurafsky, Percy Liang, Chris Potts, Tatsunori Hashimoto, and Monica S. Lam. Part of the Stanford AI Lab.	
	<ul style="list-style-type: none">• Researching algorithms that allow computers to process, generate, and understand human languages.	
	<i>Research Assistant</i>	2018 - 2022
	Stanford Language and Cognition Lab	
	<ul style="list-style-type: none">• Research Lab run by Professor Michael C. Frank.	
	<ul style="list-style-type: none">• Using computational and experimental methods to study language acquisition and early cognitive development.	
	<i>Research Intern</i>	2020
	Reinforcement Learning Team, Microsoft Research Montreal	
	<ul style="list-style-type: none">• Mentored by Dr. Romain Laroche.	
	<ul style="list-style-type: none">• Studying language emergence in neural multi-agent communication game setups.	

HONORS AND AWARDS

Graduate

- SSHRC Doctoral Fellowship 2018 - 2022
- Stanford Alumni Community Impact Award 2021
- Diverse Intelligences Summer Institute Fellowship 2018
- Joseph-Armand Bombardier Canada Graduate Scholarship (declined) 2017
- Rhodes Scholarship Finalist 2017

Undergraduate

- Dean's Honour List, McGill University 2015, 2016, 2017
- U2 Academic Achievement Award, McGill Linguistics Department 2016
- Arts Research Internship Award, McGill University 2016
- Internship Award *txtLab@McGill* 2015, 2016
- Regroupement des fondations collégiales de Montréal Scholarship 2013
- Highest Academic Achievement Award, CÉGEP du Vieux Montréal 2012, 2013

PUBLICATIONS *Refereed papers*

Portelance, E., M. C. Frank, D. Jurafsky, A. Sordoni, R. Laroché. (2021). The Emergence of the Shape Bias Results from Communicative Efficiency. *Proceedings of the 25th Conference on Computational Natural Language Learning (CoNLL)*.

Portelance, E., J. Degen, M. C. Frank. (2020). Predicting Age of Acquisition in Early Word Learning Using Recurrent Neural Networks. *Proceedings of CogSci 2020*.

Portelance, E. (2020). Genuine Verb stranding VP-ellipsis in Lithuanian. *Proceedings of the 50th Annual Meeting of the North East Linguistic Society (NELS 50)*.

Portelance, E. and A. Piper. (2016). How Cultural Capital Works: Prizewinners, Bestsellers, and the Time of Reading. *Post-45*.

Book chapters

Potts, C., T. Icard, **E. Portelance**, D. Card, K. Zhou, J. Etchemendy. (2021). Philosophy of Understanding. In *On the Opportunities and Risks of Foundation Models*, Ed. by the Center for Research on Foundation Models (CRFM) at Stanford University. *arXiv:2108.07258*.

Technical reports

Portelance, E., A. Bruno, L. Bergen, T. J. O'Donnell. (2019). Grammar Induction for Minimalist Grammars using Variational Bayesian Inference. *arXiv:1710.11350*

Harasim, D., A. Bruno, **E. Portelance**, T. J. O'Donnell. (2018). A generalised parsing framework for Abstract Grammars. *arXiv:1710.11301*

TALKS

Invited talks

- **Portelance, E.** (2021). *Learning Strategies for the Emergence of Language in Iterated Learning*. Presentation at the Montreal Computational & Quantitative Linguistics Lab (MCQLL), McGill University.
- **Portelance, E.** (2020). *Emergent communication in multi-agent neural networks*. Presentation at the Reinforcement Learning Group, Microsoft Research (Redmond, Cambridge, New York, Montreal), Virtual.

- **Portelance, E.** (2019). *Verb stranding ellipsis in Lithuanian: verbal identity and head movement*. Presentation at the Syntax & Semantics circle, University of California, Berkeley.

Conference presentations

- **Portelance, E.**, M. C. Frank, D. Jurafsky, A. Sordoni, R. Laroché. (2021). *The Emergence of the Shape Bias Results from Communicative Efficiency*. Presentation at the Conference on Empirical Methods in Natural Language Processing (EMNLP)/ Conference on Natural Language Learning (CoNLL), Punta Cana, DR.
- **Portelance, E.**, J. Degen, M. C. Frank. (2020). *Predicting Age of Acquisition in Early Word Learning Using Recurrent Neural Networks*. Presentation at CogSci, Virtual.
- **Portelance, E.**, J. Degen, M. C. Frank. (2020). *Using neural network language models to predict age of acquisition for early vocabulary*. Presentation at the International Conference for Infant Studies, Virtual.
- **Portelance, E.**, G. Kachergis, M.C. Frank. (2019). *Comparing memory-based and neural network models of early syntactic development*. Poster presentation at the Boston University Conference on Language Development, Boston, MA.
- **Portelance, E.** (2019). *Genuine Verb stranding VP-ellipsis in Lithuanian*. Presentation at the 50th Annual Meeting of the North East Linguistic Society, Cambridge, MA.
- **Portelance, E.**, A. Bruno, D. Harasim, L. Bergen, T. J. O'Donnell. (2018). *A Framework for Lexicalized Grammar Induction Using Variational Bayesian Inference*. Poster presentation at the Learning Language in Humans and Machines conference, Paris.
- **Portelance, E.** (2018). *On the move: Free word order in Lithuanian*. Presentation at the Association for the Advancement of Baltic Studies Conference. Stanford.
- **Portelance, E.**, A. Bruno, and T. J. O'Donnell. (2017). *Unsupervised induction of natural language dependency structures*. Poster presentation at the Montreal AI Symposium, Montreal.
- **Portelance, E.** and A. Piper. (2017). *Understanding Narrative: Computational approaches to detecting narrative frames*. Poster presentation at the Digital Humanities Conference. Montreal.

TEACHING MENTORING

Stanford University

Consultant for *Software and Services for Data Science (SSDS)* 2019 - 2022

- Hold weekly walk-in hours for programming and statistics consultations for all members of the Stanford community.
- Prepared and taught workshops on code reproducibility, code reusability, and an introduction to functional programming.

Mentor for the Symbolic Systems undergraduate RA Program 2021

- Advised RAs and taught them about the research process from start to finish.

Mentor for CS Undergraduate Mentoring Program AY 2020-2021

- Mentored female students in Computer Science considering graduate school and careers in research and development.

- TA for *Introduction to Linguistics* with Katherine Hilton Fall 2020
- Prepared and taught weekly labs with hands-on exercises and group activities for two class subgroups.
- TA for *Introduction to Psycholinguistics* with Judith Degen Fall 2019
- Prepared and taught guest lectures on language acquisition and research methodologies: corpus, experimental, and computational model studies.
- Corpus TA AY 2018 - 2019
- Managed all NLP corpora available at Stanford and consulted with students and researchers about their access, best usage cases, and licensing.

McGill University

- TA for *Syntax 1* with Junko Shimoyama Winter 2016

**ACADEMIC
SERVICE**

- Cognitive Science Seminar Administrator 2019 - 2022
- Graduate Student Representative AY 2019 - 2020
- Colloquium committee AY 2018 - 2019
- Editor on *Formal Approaches to Slavic Linguistics 27* proceedings 2018 - 2019
- Graduate Studies Committee 2018
- Friday Social Committee AY 2017 - 2018

LANGUAGES

English (native), French (native), Lithuanian (intermediate), Spanish (intermediate), Russian (beginner/for research)