# MENGYANG QIU

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#### **EDUCATION**

University at Buffalo, Buffalo, NY	
Ph.D., Communicative Disorders and Sciences (CogSci Track)	2016 – 2023
Dissertation: The Information Accumulation Perspective of Cognitive Aging	
Advisors: Nichol Castro, Ph.D.; Brendan T. Johns, Ph.D.	
M.S., Computational Linguistics/Natural Language Processing	2018 – 2019
M.S. Project: Artificial Error Generation with Fluency Filtering	
Advisor: Jungyeul Park, Ph.D.	
M.A., General Linguistics	2013 – 2016
M.A. Project: Verb Aspect and the Activation of Location Information	
Advisor: Jean-Pierre Koenig, Ph.D.	
B.A., Psychology & Linguistics (Honors in Language and Cognition)	2010 – 2013
Honors Thesis: Personifications in Mandarin and English: A Comparative Perspective	
Advisor: Jean-Pierre Koenig, Ph.D.	
Summa Cum Laude; Minor in Sociology	

## ACADEMIC POSITIONS

Assistant Professor (Limited Term) | Department of Psychology 2023–Present

Fall 2021

McGill University, Montreal, QC

Graduate Research Trainee | Department of Psychology

McGill Cognitive Computing Lab Advisor: Brendan T. Johns, Ph.D.

## HONORS & AWARDS

NIDCD Research Symposium in Clinical Aphasiology Student Fellowship, \$1600	2022
Mark Diamond Research Fund, University at Buffalo, \$2964	2020 – 2021
New York State Graduate Student Employees Union Award, \$2202.50	2015
Wolfgang Wölck Outstanding Graduating Senior Award, University at Buffalo, \$250	2013

## **PUBLICATIONS**

- Zeng, M., Kuang, J., **Qiu**, **M.**, Song, J., & Park, J. (submitted). Evaluating prompting strategies for grammatical error correction based on language proficiency. *Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation*.
- Wang, I. X., Wu, X., Coates, E., Zeng, M., Kuang, J., Ihn, J., Hou, B., Kim, K., Li, Z., Qin, X., Liu, S., Qiu, M., Song, J., & Park, J. (submitted). Write it right: Automated writing evaluation with corrective feedback. *Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation*.
- Li, Y., & Qiu, M. (2023). A network analysis of the semantic evolution of 'fruit' and 'stone' in Tibeto-Burman languages. *PsyArXiv*. https://doi.org/10.31234/osf.io/dn75w.

- **Qiu**, **M.**, & Johns, B. T. (2021). A distributional and sensorimotor analysis of noun and verb fluency. PsyArXiv. https://doi.org/10.31234/osf.io/e9n8w.
- Qiu, M., Castro, N., & Johns, B. T. (2021). Structural comparisons of noun and verb networks in the mental lexicon. *Proceedings of the 43rd Annual Conference of the Cognitive Science Society*, 1649–1655. https://escholarship.org/uc/item/4b20s6wp.
- Qiu, M., & Johns, B. T. (2020). Semantic diversity in paired-associate learning: Further evidence for the information accumulation perspective of cognitive aging. *Psychonomic Bulletin & Review*, 27(1), 114–121. https://doi.org/10.3758/s13423-019-01691-w.
- Qiu, M., & Park, J. (2019). Artificial error generation with fluency filtering. *Proceedings of the Fourteenth Workshop on Innovative Use of NLP for Building Educational Applications*, 87–91. https://doi.org/10.18653/v1/W19-4408.
- Qiu, M., Chen, X., Liu, M., Parvathala, K., Patil, A., & Park, J. (2019). Improving precision of grammatical error correction with a cheat sheet. *Proceedings of the Fourteenth Workshop on Innovative Use of NLP for Building Educational Applications*, 240–245. https://doi.org/10.18653/v1/W19-4425.

## CONFERENCE PRESENTATIONS & POSTERS

- Stipancic, K. L., van Brenk, F., **Qiu**, **M.**, & Tjaden, K. (submitted). Clinically important change in speech intelligibility from different perspectives: A pilot study [Poster presentation]. 2024 Conference on Motor Speech, San Diego, CA. https://www.madonna.org/motor-speech-conference.
- Li, Y., & Qiu, M. (2023, May). The semantic evolution of 'fruit' and 'stone' in Sino-Tibetan languages [Conference presentation]. 32nd Annual Meeting of the Southeast Asian Linguistics Society, Chiang Mai, Thailand. https://seals32.human.cmu.ac.th.
- Stipancic, K. L., van Brenk, F., **Qiu**, **M.**, & Tjaden, K. (2022, August). Progress toward estimating the minimal clinically important difference of speech intelligibility: A crowdsourced perceptual experiment [Poster presentation]. 8th International Conference on Speech Motor Control, Groningen, the Netherlands. https://slp-nijmegen.nl/smc2022/.
- Qiu, M., & Castro, N. (2022, May). Developing a web-based stimulus selection hub for anomia treatment using R and Shiny [Poster presentation]. 51st Clinical Aphasiology Conference, Wrightsville Beach, NC, United States. https://clinicalaphasiologyconference.org.
- Qiu, M., & Castro, N. (2021, October). Comparing semantic networks of early vocabulary across languages [Conference presentation]. Complexity and Cognition: Satellite Symposium at the Conference on Complex Systems. https://sites.google.com/view/compcogccs2021.
- Qiu, M. (2020, November). Using natural language processing for language sample analysis [Poster presentation]. Annual Convention of the American Speech-Language-Hearing Association, San Diego, CA, United States (Convention canceled due to COVID-19).
- Sun, S., & Qiu, M. (2020, November). Early production of animal vocabulary in Mandarin Chinese and American English [Poster presentation]. Annual Convention of the American Speech-Language-Hearing Association, San Diego, CA, United States (Convention canceled due to COVID-19).
- Qiu, M., & Johns, B. T. (2018, November). Memory searching pathway underlying verb fluency [Poster presentation]. Annual Convention of the American Speech-Language-Hearing Association, Boston, MA, United States. https://convention.asha.org.
- Min, H., Guo, L., Higginbotham, D. J., & **Qiu**, **M.** (2018, November). How does writing medium influence the operation of writing processes and writing quality? [Poster presentation]. Annual Convention of the American Speech-Language-Hearing Association, Boston, MA, United States. https://convention.asha.org.

## RESEARCH EXPERIENCE

University at Buffalo, Buffalo, NY	
Graduate Research Assistant   PI: Nichol Castro, Ph.D.	2020 – 2021
Adult Language Network Lab, CDS Department	
Online Experiment Developer   PI: Thea Knowles, Ph.D.	Spring 2020
Clinical Applications of Speech Acoustics Lab, CDS Department	
Project Leader   Supervisor: Jungyeul Park, Ph.D.	Spring 2019
Grammatical Error Correction Project, Department of Linguistics	
Graduate Research Assistant   PI: Brendan T. Johns, Ph.D.	2016-2019
Computational Language and Memory Lab, CDS Department	
Graduate Research Assistant   PI: Christopher McNorgan, Ph.D.	Summer 2017
Computational Cognitive Neuroscience Lab, Department of Psychology	
Undergraduate Research Assistant   PI: Gail Mauner, Ph.D.	2012 – 2013
Psycholinguistics Lab, Department of Psychology	
Undergraduate Research Assistant   PI: Paul Luce, Ph.D.	Summer 2012
Language Perception Lab, Department of Psychology	
Undergraduate Research Assistant   PI: Eon-Suk Ko, Ph.D.	Summer 2011
Child Language Development Project, Department of Linguistics	
TEACHING EXPERIENCE	
Instructor of Record	
Trent University, Peterborough, ON	
PSYC 2400: Introduction to Cognitive Psychology	Winter 2022, Fall 2023
PSYC 3220: Neuropsychology	Fall 2023
PSYC 3451: Psychology of Language	Winter, Summer 2022
Toronto Metropolitan University International College, Toronto, ON	
Toronto Metropolitan University International College, Toronto, ON CPSY 102: Introduction to Psychology I	2022–Present
	2022-Present
CPSY 102: Introduction to Psychology I	2022–Present Winter 2022
CPSY 102: Introduction to Psychology I University of Guelph, Guelph, ON	
CPSY 102: Introduction to Psychology I University of Guelph, Guelph, ON PSYC 1010: Making Sense of Data in Psychological Research	
CPSY 102: Introduction to Psychology I University of Guelph, Guelph, ON PSYC 1010: Making Sense of Data in Psychological Research University at Buffalo, Buffalo, NY CHI 101 & 102: First-Year Chinese	Winter 2022
CPSY 102: Introduction to Psychology I University of Guelph, Guelph, ON PSYC 1010: Making Sense of Data in Psychological Research University at Buffalo, Buffalo, NY CHI 101 & 102: First-Year Chinese  Teaching Assistant/Guest Lecturer	Winter 2022
CPSY 102: Introduction to Psychology I University of Guelph, Guelph, ON PSYC 1010: Making Sense of Data in Psychological Research University at Buffalo, Buffalo, NY CHI 101 & 102: First-Year Chinese  Teaching Assistant/Guest Lecturer University of Toronto Scarborough, Scarborough, ON	Winter 2022 2013–2015
CPSY 102: Introduction to Psychology I University of Guelph, Guelph, ON PSYC 1010: Making Sense of Data in Psychological Research University at Buffalo, Buffalo, NY CHI 101 & 102: First-Year Chinese  Teaching Assistant/Guest Lecturer University of Toronto Scarborough, Scarborough, ON LINA 01: Introduction to Linguistics	Winter 2022 2013–2015 Fall 2021, Fall 2022
CPSY 102: Introduction to Psychology I University of Guelph, Guelph, ON PSYC 1010: Making Sense of Data in Psychological Research University at Buffalo, Buffalo, NY CHI 101 & 102: First-Year Chinese  Teaching Assistant/Guest Lecturer University of Toronto Scarborough, Scarborough, ON LINA 01: Introduction to Linguistics LINB 60: Comparative Study of English and Chinese	Winter 2022 2013–2015 Fall 2021, Fall 2022 Winter 2022
CPSY 102: Introduction to Psychology I University of Guelph, Guelph, ON PSYC 1010: Making Sense of Data in Psychological Research University at Buffalo, Buffalo, NY CHI 101 & 102: First-Year Chinese  Teaching Assistant/Guest Lecturer University of Toronto Scarborough, Scarborough, ON LINA 01: Introduction to Linguistics LINB 60: Comparative Study of English and Chinese PSYC 70: Advanced Research Methods Laboratory	Winter 2022 2013–2015 Fall 2021, Fall 2022
CPSY 102: Introduction to Psychology I University of Guelph, Guelph, ON PSYC 1010: Making Sense of Data in Psychological Research University at Buffalo, Buffalo, NY CHI 101 & 102: First-Year Chinese  Teaching Assistant/Guest Lecturer University of Toronto Scarborough, Scarborough, ON LINA 01: Introduction to Linguistics LINB 60: Comparative Study of English and Chinese PSYC 70: Advanced Research Methods Laboratory Trent University, Peterborough, ON	Winter 2022 2013–2015 Fall 2021, Fall 2022 Winter 2022 Winter 2022
CPSY 102: Introduction to Psychology I University of Guelph, Guelph, ON PSYC 1010: Making Sense of Data in Psychological Research University at Buffalo, Buffalo, NY CHI 101 & 102: First-Year Chinese  Teaching Assistant/Guest Lecturer University of Toronto Scarborough, Scarborough, ON LINA 01: Introduction to Linguistics LINB 60: Comparative Study of English and Chinese PSYC 70: Advanced Research Methods Laboratory Trent University, Peterborough, ON PSYC 2400: Introduction to Cognitive Psychology	Winter 2022 2013–2015 Fall 2021, Fall 2022 Winter 2022
CPSY 102: Introduction to Psychology I University of Guelph, Guelph, ON PSYC 1010: Making Sense of Data in Psychological Research University at Buffalo, Buffalo, NY CHI 101 & 102: First-Year Chinese  Teaching Assistant/Guest Lecturer University of Toronto Scarborough, Scarborough, ON LINA 01: Introduction to Linguistics LINB 60: Comparative Study of English and Chinese PSYC 70: Advanced Research Methods Laboratory  Trent University, Peterborough, ON PSYC 2400: Introduction to Cognitive Psychology University at Buffalo, Buffalo, NY	Winter 2022 2013–2015  Fall 2021, Fall 2022 Winter 2022 Winter 2022 Summer 2022
CPSY 102: Introduction to Psychology I University of Guelph, Guelph, ON PSYC 1010: Making Sense of Data in Psychological Research University at Buffalo, Buffalo, NY CHI 101 & 102: First-Year Chinese  Teaching Assistant/Guest Lecturer University of Toronto Scarborough, Scarborough, ON LINA 01: Introduction to Linguistics LINB 60: Comparative Study of English and Chinese PSYC 70: Advanced Research Methods Laboratory Trent University, Peterborough, ON PSYC 2400: Introduction to Cognitive Psychology University at Buffalo, Buffalo, NY CDS 151: Introduction to Speech-Language Pathology and Audiology	Winter 2022 2013–2015  Fall 2021, Fall 2022 Winter 2022 Winter 2022 Summer 2022 2016–2021
CPSY 102: Introduction to Psychology I University of Guelph, Guelph, ON PSYC 1010: Making Sense of Data in Psychological Research University at Buffalo, Buffalo, NY CHI 101 & 102: First-Year Chinese  Teaching Assistant/Guest Lecturer University of Toronto Scarborough, Scarborough, ON LINA 01: Introduction to Linguistics LINB 60: Comparative Study of English and Chinese PSYC 70: Advanced Research Methods Laboratory  Trent University, Peterborough, ON PSYC 2400: Introduction to Cognitive Psychology University at Buffalo, Buffalo, NY	Winter 2022 2013–2015  Fall 2021, Fall 2022 Winter 2022 Winter 2022 Summer 2022

## PROFESSIONAL SERVICE & AFFILIATIONS

#### Journal Article Reviews

Behavior Research Methods

Journal of Speech, Language, and Hearing Research

#### Conference Reviews

The Conference on Empirical Methods in Natural Language Processing (EMNLP)

The Annual Meeting of the Cognitive Science Society

Workshop on Innovative Use of NLP for Building Educational Applications

2023—Present
2022—Present

Member

Cognitive Science Society

ACL Special Interest Group for Building Educational Applications

2021–Present
2019–Present

## TECHNICAL SKILLS

Programming: Python, Javascript, Java, R, Matlab

Experiment: jsPsych, PsychoPy/JS, JATOS, psiTurk, E-Prime

NLP: PyTorch, Keras, SpaCy, NLTK Others: L⁴TEX, SQL, Prolog, Praat

## OTHER INFORMATION

Citizenship: China

Permanent Residency: Canada

Languages: Mandarin (native), English (fluent), Cantonese (receptive)

## REFERENCES

#### Nichol Castro, Ph.D.

Assistant Professor

Director of the Adult Language Network Laboratory

Department of Communicative Disorders and Sciences

University at Buffalo

E-mail: nicholca@buffalo.edu

https://sites.google.com/view/alnlab

#### Brendan T. Johns, Ph.D.

Assistant Professor

Director of the McGill Cognitive Computing Laboratory

Department of Psychology

McGill University

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#### Jean-Pierre Koenig, Ph.D.

Professor

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University at Buffalo

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https://www.jeanpierrekoenig.com

#### Jungyeul Park, Ph.D.

Lecturer

MDS Computational Linguistics Program

Department of Linguistics

University of British Columbia

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https://linguistics.ubc.ca/profile/jungyeul-park/