# MENGYANG QIU

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# **EDUCATION**

#### University at Buffalo, Buffalo, NY Ph.D., Communicative Disorders and Sciences (CogSci Track) 2016–2022(Expected) Advisors: Brendan T. Johns, Ph.D.; Nichol Castro, Ph.D. M.S., Computational Linguistics 2018 - 2019M.S. Project: Artificial Error Generation with Fluency Filtering Advisor: Jungyeul Park, Ph.D. M.A., General Linguistics 2013 - 2016M.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 McGill University, Montreal, QC Graduate Research Trainee Fall 2021 McGill Cognitive Computing Lab, Department of Psychology

# **PUBLICATIONS**

Advisor: Brendan T. Johns, Ph.D.

- **Qiu**, **M.**, & Johns, B. T. (2021). A distributional and sensorimotor analysis of noun and verb fluency. *PsyArXiv*. doi:10.31234/osf.io/e9n8w.
- Qiu, M., Castro, N., & Johns, B. T. (2021). Structural comparisons of noun and verb networks in the mental lexicon. In *Proceedings of the 43rd Annual Conference of the Cognitive Science Society* (pp. 1649–1655). Retrieved from 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. doi:10.3758/s13423-019-01691-w.
- Qiu, M., & Park, J. (2019). Artificial error generation with fluency filtering. In *Proceedings of the Fourteenth Workshop on Innovative Use of NLP for Building Educational Applications* (pp. 87–91). doi: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. In *Proceedings of the Fourteenth Workshop on Innovative Use of NLP for Building Educational Applications* (pp. 240–245). doi:10.18653/v1/W19-4425.

#### CONFERENCE PRESENTATIONS & POSTERS

- Stipancic, K. L., van Brenk, F., **Qiu**, **M.**, & Tjaden, K. (submitted). Progress toward estimating the minimal clinically important difference of speech intelligibility: A crowdsourced perceptual experiment.
- Qiu, M., & Castro, N. (2022, May). Developing a web-based stimulus selection hub for anomia treatment using R and Shiny. Poster to be presented at the 51st Clinical Aphasiology Conference.
- Qiu, M., & Castro, N. (2021, October). Comparing semantic networks of early vocabulary across languages. Talk presented at Complexity and Cognition: Satellite Symposium at the Conference on Complex Systems 2021.

- Qiu, M. (2020, November). Using natural language processing for language sample analysis. Proposal accepted at the *Annual Convention of the American Speech-Language-Hearing Association*, San Diego, CA (Convention canceled due to COVID-19).
- Sun, S., & **Qiu**, **M.** (2020, November). Early production of animal vocabulary in Mandarin Chinese and American English. Proposal accepted at the *Annual Convention of the American Speech-Language-Hearing Association*, San Diego, CA (Convention canceled due to COVID-19).
- **Qiu**, M., & Johns, B. T. (2018, November). Memory searching pathway underlying verb fluency. Poster presented at the *Annual Convention of the American Speech-Language-Hearing Association*, Boston, MA.
- 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 presented at the *Annual Convention of the American Speech-Language-Hearing Association*, Boston, MA.

# **HONORS & AWARDS**

NIDCD Research Symposium in Clinical Aphasiology Student Fellowship, \$1700	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

### RESEARCH EXPERIENCE

University at Buffalo, Buffalo, NY	
Graduate Research Assistant   PI: Nichol Castro, Ph.D.	2020–Present
Adult Language Network Lab	
Department of Communicative Disorders and Sciences	
Programmer   PI: Thea Knowles, Ph.D.	Spring 2020
Clinical Applications of Speech Acoustics Lab	
Department of Communicative Disorders and Sciences	
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	
Department of Communicative Disorders and Sciences	
Graduate Research Assistant   PI: Christopher McNorgan, Ph.D.	Summer 2017
Computational Cognitive Neuroscience Lab, Department of Psychoplogy	
Undergraduate Research Assistant   PI: Gail Mauner, Ph.D.	2012 – 2013
Psycholinguistics Lab, Department of Psychoplogy	
Undergraduate Research Assistant   PI: Paul Luce, Ph.D.	Summer 2012
Language Perception Lab, Department of Psaychology	
Undergraduate Research Assistant   PI: Eon-Suk Ko, Ph.D.	Summer 2011
Child Language Development Project, Department of Linguistics	

# TEACHING EXPERIENCE

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$\Delta \mathbf{c}$	Instructor	
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${f Trent}$	University,	Peterboroug	h, ON
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PSYC 2400:	Introduction to Cognitive Psychology	Winter	2022
PSYC 3451:	Psychology of Language	Winter	2022

#### University of Guelph, Guelph, ON PSYC 1010: Making Sense of Data in Psychological Research Winter 2022 University at Buffalo, Buffalo, NY CHI 101 & 102: First-Year Chinese 2013-2015 As Teaching Assistant/Guest Lecturer University of Toronto Scarborough, Scarborough, ON Winter 2022 LINB 60: Comparative Study of English and Chinese PSYC 70: Advanced Research Methods Laboratory Winter 2022 LINA 01: Introduction to Linguistics Fall 2021 University at Buffalo, Buffalo, NY CDS 151: Introduction to Speech-Language Pathology and Audiology 2016-2021 CDS 564: Language Disorders in Adults 2017-2019 CDS 480/687: Disorders of Memory 2017-2019

# PROFESSIONAL SERVICE & AFFILIATIONS

#### Journal Article Reviews

Behavior Research Methods (Under the supervision of Nichol Castro, Ph.D.)

Journal of Speech, Language, and Hearing Research (Under the supervision of Ling-Yu Guo, Ph.D.)

# Conference Reviews

Conference Reviews	
The Annual Meeting of the Cognitive Science Society	2022-Present
Workshop on Innovative Use of NLP for Building Educational Applications	2020-Present
Member	
Cognitive Science Society	2021-Present
ACL Special Interest Group for Building Educational Applications	2019–Present

# TECHNICAL SKILLS

Programming: Python, Javascript, Java, R, Matlab

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

NLP: PyTorch, Keras, SpaCy, NLTK Others: LATEX, Git, Prolog, Praat

#### OTHER INFORMATION

Citizenship: China

Permanent Residency: Canada

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

# REFERENCES

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

Assistant Professor

Director of the McGill Cognitive Computing Lab

Department of Psychology

McGill University

brendan.johns@mcgill.ca

http://btjohns.com

#### Nichol Castro, Ph.D.

Assistant Professor

Director of the Adult Language Network Lab

Department of Communicative Disorders and Sciences

University at Buffalo

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

# Jeff Higginbotham, Ph.D.

Professor, ASHA Fellow

Director of the Communication and Assistive Device Lab

Department of Communicative Disorders and Sciences

University at Buffalo

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https://ubwp.buffalo.edu/cadl

# Christopher McNorgan, Ph.D.

Assistant Professor

Director of the Computational Cognitive Neuroscience Lab

Department of Psychology

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