

Maria C. D'Angelo

Curriculum Vitae

October 2024

MARIA C. D'ANGELO

Employment History

Staff Product Data Scientist (previously Data Science Manager) Shopify	2020-present
Director of Data Science (previously Senior Data Scientist) Delphia	2018-2020
Data Scientist Zero Gravity Labs, LoyaltyOne	2017-2018
Research Scientist Maple Leaf Sports & Entertainment	2016-2017
Postdoctoral Research Fellow Rotman Research Institute at Baycrest	2013-2016
Teaching Assistant Department of Psychology, Neuroscience & Behaviour McMaster University	2007-2012
Research Assistant Programme for Educational Research and Development, Brooks Lab McMaster University	2006-2008

Academic History

Ph.D., Psychology, Neuroscience & Behaviour, <i>Valedictorian</i> , McMaster University	2008-2013
B.Sc, Honours Psychology, <i>Summa Cum Laude</i> , McMaster University	2004-2008

Areas of Interest

Human memory
Computational models of memory
Implicit learning and memory
Control over implicit memory

Scholarships and Awards

Soupcoff Fellowship, \$2,400	2015-2016
Ontario Research Coalition – Early Researcher Award, \$3,000	2014-2015
CIHR Postdoctoral Fellowship, \$135,000	2013-2016
Yates Travel Award, \$500	2013
NSERC Michael Smith Foreign Study Supplements Award, \$5,300	2013

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McMaster Graduate Student Travel Award, \$500	2011
NSERC Alexander Graham Bell Canada Graduate Scholarship (CGS) Doctoral, \$105,000	2010-2013
NSERC Alexander Graham Bell Canada Graduate Scholarship (CGS) Masters, \$17,300	2009-2010
Ontario Graduate Scholarship, \$15,000 (declined)	2010-2011
Ontario Graduate Scholarship, \$15,000 (declined)	2009-2010
McMaster Psychology Departmental Scholarship, \$10,000	2008-2009
Helen Sawyer Hogg Admission Scholarship, \$5,000 (declined)	2008-2009
Dean's Honour List Distinction	2006-2008
McMaster University Entrance Award, \$1,500	2004-2005

Membership in Professional Organizations

Canadian Society for Brain, Behaviour and Cognitive Science
Cognitive Neuroscience Society
The Psychonomic Society

Publications

Articles published or accepted in refereed journals

1. Rosenbaum, R. S., Halilova, J. G., Agnihotri, S., **D'Angelo, M. C.**, Winocur, G., Ryan, J. D., & Moscovitch, M. Dramatic changes to well-known places go unnoticed. *Neuropsychologia*, 196, 108818. <https://doi.org/10.1016/j.neuropsychologia.2024.108818>
2. Aashat, S., **D'Angelo, M. C.**, Rosenbaum, R. S., & Ryan, J. D. (2024). Effects of extended practice and unitization on relational memory in older adults and neuropsychological lesion cases. *Aging, Neuropsychology, and Cognition*, 1–36. <https://doi.org/10.1080/13825585.2024.2319892>
3. Wing, E. A., **D'Angelo, M. C.**, Gilboa, A., & Ryan, J. D. (2021). The role of the ventromedial prefrontal cortex and basal forebrain in relational memory and inference. *Journal of Cognitive Neuroscience*, 33(9), 1976–1989. https://doi.org/10.1162/jocn_a_01722
4. Davis, H., Rosner, T.M., **D'Angelo, M.C.** et al. Selective attention effects on recognition: the roles of list context and perceptual difficulty. *Psychological Research* 84, 1249–1268 (2020). <https://doi.org/10.1007/s00426-019-01153-x>
5. Ryan, J. D., Kacollja, A., **D'Angelo, M. C.**, Newsome, R. N., Gardner, S., & Rosenbaum, R. S. (2020). Existing semantic knowledge provides a schematic scaffold for inference in early cognitive decline, but not in amnesic MCI. *Memory*, 28(1), 75–96. <https://doi.org/10.1080/02643294.2019.1684886>
6. Ryan, J. D., **D'Angelo, M. C.**, Kacollja, A., Gardner, S., & Rosenbaum, R. S. (2020). Gradual learning and inflexible strategy use in amnesia: Evidence from case HC. *Neuropsychologia*, 137, 107280. DOI: <https://doi.org/10.1016/j.neuropsychologia.2019.107280>
7. Yeung, L.-K., Olsen, R. K., Hong, B., Mihajlovic, V., **D'Angelo, M. C.**, Kacollja, A., Ryan, J. D., & Barense, M. D. (2019). Object-in-place memory predicted by anterolateral entorhinal cortex and parahippocampal cortex volume in older adults. *Journal of Cognitive Neuroscience*, 31(5), 711–729. DOI: https://doi.org/10.1162/jocn_a_01385

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8. Rosner, T.M, López-Benítez, R., **D'Angelo, M.C.**, Thomson, D.R., & Milliken, B. (2020). Remembering "primed" words: A counter-intuitive effect of repetition on recognition memory. *Canadian Journal of Experimental Psychology*.
9. **D'Angelo, M.C.**, Kacollja, A., Noly-Gandon, A., Barense, M.D., & Ryan, J.D. (2017). Breaking down unitization: Is the whole greater than the sum of its parts? *Memory & Cognition*, DOI: <https://doi.org/10.3758/s13421-017-0736-x>
10. **D'Angelo, M.C.**, Li, T., Young, M.E., & Humphreys, K.R. (2017). The role of medical language in self-triage decision making. *Frontiers in Health Communication*, DOI: <https://doi.org/10.3389/fcomm.2017.00006>
11. Olsen, R.K. , Yeung, L.-K., Noly-Gandon, A., **D'Angelo, M.C.**, Kacollja, A., Smith, V.M, Ryan, J.D., & Barense, M.D. (2017). Human anterolateral entorhinal cortex volumes are associated with cognitive decline in aging prior to clinical diagnosis. *Neurobiology of Aging*, 57, 195-205, <https://doi.org/10.1016/j.neurobiolaging.2017.04.025>.
12. Yeung, L.-K., Olsen, R.K., Bild-Enkin, H.E.P., **D'Angelo, M.C.**, Kacollja, A., McQuiggan, D.A., Keshabyan, A., Ryan, J.D., & Barense, M.D. (2017). Anterolateral entorhinal cortex volume predicted by altered intra-item configural processing. *Journal of Neuroscience*, 37, 5527-5538, DOI: <https://doi.org/10.1523/JNEUROSCI.3664-16.2017>
13. **D'Angelo, M.C.**, Rosenbaum, R.S., & Ryan, J.D. (2016). Semantic knowledge does not support relational inference in a case of developmental amnesia. *Hippocampus* 26 (10), 1291-1302
14. **D'Angelo, M.C.**, Thomson, D.R., Milliken, B., & Tipper, S.P. (2016). Negative priming 1985 to 2015: A measure of inhibition, the emergence of alternative accounts, and the multiple process challenge. *The Quarterly Journal of Experimental Psychology* 69 (10), 1890-1909
15. **D'Angelo, M.C.**, Smith, V.M., Kacollja, A., Zhang, F., Binns, M., Barense, M., & Ryan, J.D. (2016). The effectiveness of unitization in mitigating age-related relational learning impairments depends on existing cognitive status. *Aging, Neuropsychology, and Cognition* 23 (6), 667-690
16. Ryan, J.D., **D'Angelo, M.C.**, Kamino, D., Ostreicher, M., Moses, S.N., & Rosenbaum, R.S. (2016). Relational learning and transitive expression in aging and amnesia. *Hippocampus*, 26, 170-184.
17. **D'Angelo, M.C.**, Kacollja, A., Rabin, J.S., Rosenbaum, R.S., & Ryan, J.D. (2015). Unitization supports lasting performance and generalization on a relational memory task: Evidence from a previously undocumented developmental amnesic case. *Neuropsychologia*, 77, 185-200.
18. **D'Angelo, M.C.**, & Humphreys, K.R. (2015). Tip-of-the-Tongue states reoccur because of implicit learning, but resolving them helps. *Cognition*, 142, 166-190. doi:10.1016/j.cognition.2015.05.019
19. Rosner, T.M., **D'Angelo, M.C.**, MacLellan, E., & Milliken, B. (2014). Selective attention and recognition: Effects of congruency on episodic learning. *Psychological Research*, 79, 411-424. doi: 10.1007/s00426-014-0572-6
20. **D'Angelo, M.C.**, Milliken, B., Jiménez, L., & Lupiáñez, J. (2014). Re-examining the role of context in implicit sequence learning. *Consciousness and Cognition*, 27, 172-193. doi: 10.1016/j.concog.2014.05.005

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21. **D'Angelo, M.C.**, Jiménez, L., Milliken, B., & Lupiáñez, J. (2013). On the specificity of sequential congruency effects in implicit learning of motor and perceptual sequences. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *39*, 69-84. doi: 10.1037/a0028474
22. **D'Angelo, M.C.**, Milliken, B., Jiménez, L., & Lupiáñez, J. (2013). Implementing flexibility in automaticity: Evidence from context-specific implicit sequence learning. *Consciousness and Cognition*, *22*, 64-81. doi: <http://dx.doi.org/10.1016/j.concog.2012.11.002>
23. **D'Angelo, M.C.**, & Humphreys, K.R. (2012). Emotional cues do not increase the likelihood of tip-of-the-tongue states. *Memory and Cognition*, *40*, 1331-1338. doi: 10.3758/s13421-012-0235-z
24. **D'Angelo, M.C.**, & Milliken, B. (2012). Context-specific control in the single-prime negative priming procedure. *Quarterly Journal of Experimental Psychology*. *65*, 887-910. doi: 10.1080/17470218.2011.630478

Conference Presentations and Posters

* *Presenting author*

1. **D'Angelo, M.C.*** (2019, November). What I've learned from {many} years of data cleaning. Brown bag presentation at the Faculty of Information, University of Toronto, Toronto, ON.
2. **D'Angelo, M.C.*** (2019, September). Can gender quota systems jumpstart team diversity? Presentation for the Bridge Builders meetup group, Toronto, ON.
3. **D'Angelo, M.C.*** (2019, May). Connecting to Google Cloud Platform. Presentation for the RLadies meetup group, Toronto, ON.
4. **D'Angelo, M.C.*** (2019, March). Dealing with bias in humans and in AI. Presentation for the Annual Meeting of Women in Data Science, Toronto, ON.
5. **D'Angelo, M.C.*** (2018, February). Cognitive Psychology & AI. Presentation for the AIGeeks meetup group, Toronto, ON.
6. **D'Angelo, M.C.*** (2017, November). Understanding season seat holder satisfaction and importance using factor analysis. Presentation for the Toronto Women's Data Group, Toronto, ON.
7. Lorentz, L.*, **D'Angelo, M.C.**, LaPointe, M.R.P., Milliken, B. (2017, September). The capture of event encoding by irrelevant distractors: Toward a common account of negative priming and inhibition of return. Poster presented at the European Society of Cognitive Psychology, International Conference, Potsdam, Germany.
8. **D'Angelo, M.C.*** (2017, March). Fan sentiment using web surveys and point of contact devices (HappyOrNot - Smiley Terminal™). Keynote presentation at the Buzz conference hosted by DigInsights, Toronto, ON
9. Davis, H.*, MacLellan, E., Rosner, T. M., **D'Angelo, M. C.**, & Milliken, B. (2016, December). Selective Attention, Conflict, and Memory: When Conflict Does and Does Not Enhance Memory Performance. Paper presented at the 26th Annual Meeting of CSBBCS, National Conference, Ottawa, ON.
10. **D'Angelo, M.C.***, Noly-Gandon, A., Kacollja, A., Barense, M.D., & Ryan, J.D. (2016, July). Breaking down unitization: Is the whole greater than the sum of its parts? Paper presented at the International Conference On Memory, International Conference, Budapest, Hungary.

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11. **D'Angelo, M.C.***, Noly-Gandon, A., Kacollja, A., Barense, M.D., & Ryan, J.D. (2016, May). Breaking down unitization: Is the whole greater than the sum of its parts? Poster accepted for presentation at the International Meeting of the Psychonomic Society, International Conference, Granada, Spain.
12. **D'Angelo, M.C.***, Rosenbaum, R.S., & Ryan, J.D. (2016, April). Semantic knowledge supports relational inference in aging but not in amnesia. Poster accepted for presentation at the Annual Meeting of the Cognitive Neuroscience Society, International Conference, New York City, NY.
13. **D'Angelo, M.C.***, Kamino, D., Ostreicher, M., Moses, S.N., Rosenbaum, R.S., & Ryan, J.D. (2015, July). Relational Learning and Inference in Aging and Amnesia. Paper presented at the International Workshop in Learning, Memory and Attention, International Conference, Granada, Spain.
14. **D'Angelo, M.C.***, Kacollja, A., Smith, V.M., Rabin, J.S., Zhang, F., Binns, M.A., Rosenbaum, R.S., Barense, M., & Ryan, J.D. (2015, March). Unitization Supports Relational Learning in Healthy Aging and Amnesic Cases. Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, International Conference, San Francisco, CA.
15. Meltzer, J.A., Kielar, A., **D'Angelo, M.C.**, Ryan, J.D., & Barense, M.D. (2015, March). Electrophysiological abnormalities in older adults at risk for dementia: Language lateralization and resting state changes. Poster presented at the 25th Annual Rotman Research Institute Neuroscience Conference, International Conference, Toronto, ON.
16. **D'Angelo, M.C.** (2014, October). Unitization Supports Relational Learning in Healthy Aging and Amnesic Cases. Invited talk at the University of Granada, Granada, Spain.
17. **D'Angelo, M.C.***, Smith, V.M., Zhang, F., Kacollja, A., Barense, M., & Ryan, J.D. (2014, July). Aging and Unitization: Unitization Supports Relational Learning in Healthy Older Adults but not those At-Risk for MCI. Paper presented at the 24th Annual Meeting of CSBBCS, National Conference, Toronto, ON.
18. **D'Angelo, M.C.***, Smith, V.M., Zhang, F., Kacollja, A., Barense, M., & Ryan, J.D. (2014, February). Unitization supports relational learning in healthy older adults, but not those at-risk for MCI. Poster presented at the 24th Annual Rotman Research Institute Neuroscience Conference, International Conference, Toronto, ON.
19. **D'Angelo, M.C.***, Smith, V.M., Zhang, F., Kacollja, A., Barense, M., & Ryan, J.D. (2014, February). Unitization supports relational learning in healthy older adults, but not those at-risk for MCI. Poster presented at the 43rd Annual Lake Ontario Visionary Establishment Conference, Regional Conference, Niagara Falls, ON.
20. Humphreys, K.R.* & **D'Angelo, M.C.** (2013, November). Learned Tip-of-the-tongue States. Paper presented at the 54th Annual Meeting of the Psychonomics Society, International Conference, Toronto, ON.
21. **D'Angelo, M.C.***, Lupiáñez, J., Jiménez, L., & Milliken, B. (2013, June). The Role of Context in the Simultaneous Learning of Two Complementary Sequences. Paper presented at the 23rd Annual Meeting of CSBBCS, National Conference, Calgary, AB.
22. **D'Angelo, M.C.***, Qiu, C.J., Zavarella, F.L., & Milliken, B. (2013, June). Inhibitory Repetition Effects: Opposing Influences of Event Updating and New Event Encoding. Paper presented at the 23rd Annual Meeting of CSBBCS, National Conference, Calgary, AB.

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23. Rosner, T.*, **D'Angelo, M.C.**, MacLellan, E.K., & Milliken, B. (2013, June). The Role of Conflict in Memory Formation. Paper presented at the 23rd Annual Meeting of CSBBCS, National Conference, Calgary, AB.
24. **D'Angelo, M.C.***, Milliken, B., Jiménez, L., & Lupiáñez, J. (2013, May). Rapid Learning and Relearning of Statistical Regularities in Sequence Learning. Paper presented at the 9th Scientific Meeting of Attention, International Conference, Palma de Mallorca, Spain.
25. **D'Angelo, M.C.***, Lupiáñez, J., Jiménez, L., & Milliken, B. (2012, November). Implementing Flexibility in Automaticity – Evidence from Context-specific Implicit Sequence Learning. Poster presented at the 53rd Annual Meeting of the Psychonomics Society, International Conference, Minneapolis, MN.
26. **D'Angelo, M.C.***, Lupiáñez, J., Jiménez, L., & Milliken, B. (2012, June). Context-specific Implicit Sequence Learning. Paper presented at the 22nd Annual Meeting of CSBBCS, National Conference, Kingston, ON.
27. **D'Angelo, M.C.***, Lupiáñez, J., Jiménez, L., & Milliken, B. (2012, May). Context-specific Implicit Sequence Learning. Poster presented at the Symposium on Attention, Halifax, NS.
28. Jiménez, L.*, **D'Angelo, M.C.**, Lupiáñez, J., & Milliken, B. (2012, May). Implicit sequence learning does not run out of control. Paper presented at the 1st joint meeting of BAP and SEPEX, International Conference, Liège, Belgium.
29. **D'Angelo, M.C.**, Lupiáñez, J.*, Jiménez, L., & Milliken, B. (2012, May). Context-specific Implicit Sequence Learning. Paper presented at the 1st joint meeting of BAP and SEPEX, International Conference, Liège, Belgium.
30. **D'Angelo, M.C.** (2012, April) Maybe automaticity isn't so rigid after all: Context-specific implicit sequence learning. Paper presented in the McMaster Cognition/Perception Seminar Series, Hamilton, ON.
31. **D'Angelo, M.C.***, Milliken, B., Lupiáñez, J., & Jiménez, L. (2012, February) Context-specific implicit sequence learning. Poster presented at the 41st Annual Lake Ontario Visionary Establishment Conference, Regional Conference, Niagara Falls, ON.
32. **D'Angelo, M.C.*** & Humphreys, K.R. (2011, June). The resolution effect in tip-of-the-tongue states. Paper presented at the 21st Annual Meeting of CSBBCS, National Conference, Winnipeg, MB.
33. **D'Angelo, M.C.***, Jiménez, L., Milliken, B., & Lupiáñez, J. (2011, June). On the specificity of sequential congruency effects in implicit learning of motor and perceptual sequences. Poster presented at the 21st Annual Meeting of CSBBCS, National Conference, Winnipeg, MB.
34. **D'Angelo, M.C.** (2010, November) Context Matters: Role of Episodic Memory in Priming Tasks. Paper presented in the McMaster Cognition/Perception Seminar Series, Hamilton, ON.
35. **D'Angelo, M.C.***, Jansen, P.A., & Humphreys, K.R. (2010, November) Implicit Learning of Tip-of-the-Tongue States: Assessing a Hebbian Learning Account. Poster presented at the 51st Annual Meeting of the Psychonomics Society, International Conference, St. Louis, MO.
36. **D'Angelo, M.C.*** & Milliken, B. (2010, June) Context-specific learning of episodic integration in repetition effects. Paper presented at the 20th Annual Meeting of CSBBCS, National Conference, Halifax, NS.

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37. **D'Angelo, M.C.*** & Humphreys, K.R. (2010, June) Examining the Time-Course of Implicit Learning of Tip-of-Tongue States. Poster presented at the 20th Annual Meeting of CSBBCS, National Conference, Halifax, NS.
38. **D'Angelo, M.C.*** & Milliken, B. (2009, June) Context-specific learning and negative priming. Paper presented at the Summer Workshop on Attention and Performance, Regional Conference, Hamilton, ON.
39. **D'Angelo, M.C.***, Young, M.E., Tangen, J.M. & Eva, K.W. (2008, June) Expectation and Working Memory: Examining Age-Related Differences in Covariation Judgments. Poster presented at the 18th Annual Meeting of CSBBCS, National Conference, London, ON.
40. **D'Angelo, M.C.***, Young, M.E., Tangen, J.M. & Eva, K.W. (2008, May) Expectation and Working Memory: Examining Age-Related Differences in Covariation Judgments. Poster presented at the Ontario Undergraduate Thesis Conference, Regional Conference, St. Catherine's, ON.
41. **D'Angelo, M.C.***, Young, M.E., Tangen, J.M. & Eva, K.W. (2008, April) Expectation and Working Memory: Examining Age-Related Differences in Covariation Judgments. Poster presented at the Women in Science and Engineering Conference, Regional Conference, Hamilton, ON.
42. **D'Angelo, M.C.***, Young, M.E., Tangen, J.M. & Eva, K.W. (2008, March) Expectation and Working Memory: Examining Age-Related Differences in Covariation Judgments. Poster presented at the McMaster University Psychology In-House Thesis Poster Session, Institutional, Hamilton, ON.

Technical Skills

Programming languages: Python, Javascript, HTML, CSS, R, Unix, LaTeX, Scala, Spark
 Statistical packages: R, SPSS

Teaching and Supervisory Experience

Workshop Leader

Using R Series: Data Management and Programming using the tidyverse, Visualization using ggplot2, Building Reports with RMarkdown, & ANOVAs and Mixed-Effects Models Using R	Summer 2017
Using R Series: Data Management, using dplyr and tidyr Visualization using ggplot2, & Mixed-Effects Models Using R	Winter 2016

Guest Lecturer

Human Memory	Fall 2012
Applied Educational Psychology	Fall 2008

Teaching Assistant

Human Memory	Fall 2009, 2011, 2012
General Laboratory in Experimental Psychology	Winter 2012
History of Psychology	Fall 2010
Human Cognition and Perception	Fall 2010

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Psychology of Language	Winter 2010
Sensory Processes	Winter 2009
Applied Educational Psychology	Fall 2008
Introduction to Experimental Psychology	Fall 2007, Winter 2008

Undergraduate Honours Thesis Student Supervisor

Jimmy Qiu	2012/13
Angela Chung	2010/11
Megan E. Vincent	2009/10
Justin Loiser	2008/09

Undergraduate Individual Study Student Supervisor

Anusha Sabanayagam	2014/17
Arber Kacollja	2013/17
Fredo Zavarella	2012/13
Olivia Podolak	2011/12
Ester Toth	2009/10

Graduate Student Supervisor

Alix Noly-Gandon	2015/16
Tamara Rosner	2012/14

Scholarly Activities and University Service

- Organizer of the Toronto Women's Data Group, 2016-2020
- Co-organizer of the Toronto Machine Learning Summit, 2017-2021
- Committee Member: Research Training Centre (RTC), Baycrest, 2013-2016
- Ad hoc reviewer: The Quarterly Journal of Experimental Psychology, Canadian Journal of Experimental Psychology, Journal of Cognitive Psychology
- Committee Member: McMaster University Teaching Assistant Network (TAN), 2009 – 2013
- Committee Member: Women in Science and Engineering (WISE) Initiative, 2006 – 2013
- First year representative for incoming psychology graduate students, 2009-2010
- Volunteer: May@Mac Lab Tour Guide, May 2008-2009
- Conference Volunteer: Summer Workshop for Attention and Performance, June 2009
- Conference Volunteer: Ontario Undergraduate Thesis Conference, May 2009
- Volunteer: McMaster Brain Bee, February 2008