

# Kevin G. O'Neill

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Education	<b>Duke University</b> <i>Ph.D.</i> , Cognitive Neuroscience Imagination and Modal Cognition Laboratory — Dr. Felipe De Brigard Pearson Laboratory — Dr. John Pearson	Fall 2018 - Present GPA: 3.95
	<b>Rensselaer Polytechnic Institute</b> <i>Bachelor of Science</i> , Cognitive Science and Computer Science	Class of 2017 GPA: 3.97
Work Experience	<b>Computer Scientist</b> ARCADIA Project — Paul Bello U.S. Naval Research Laboratory	Summer 2017 - Present
	<b>Undergraduate Researcher</b> Rensselaer Artificial Intelligence and Reasoning (RAIR) Laboratory — Dr. Selmer Bringsjord	Spring 2015 - Spring 2017
	<b>Federal Work Study</b> Rensselaer Cognitive Science Department	Fall 2014 - Spring 2017
Teaching	<b>Teaching Assistant</b> <i>Cognitive Psychology</i> — Dr. Ruth Day	Fall 2020
	<b>Teaching Assistant</b> <i>Neuromatch Academy</i> — pod-089-solid-firefly	Summer 2020
	<b>Guest Lecturer</b> <i>Are Humans Rational?</i> , <i>Intro To Logic</i> — Dr. Selmer Bringsjord	Fall 2016 - Spring 2017
Under Review/ In Preparation	<b>O'Neill, K.</b> , Henne, P., Bello, P., & De Brigard, F. (Under review). Degrading Causation.	
	<b>O'Neill, K.</b> , Liu, A., Yin, S., Brady, T., & De Brigard, F. (Under review). Category Learning Effects on Memory.	
Journal Papers	Henne, P., <b>O'Neill, K.</b> , Bello, P., Khemlani, S., & De Brigard, F. (2020). Norms Affect Prospective Causal Judgments. <i>Cognitive Science</i> .	
	<b>O'Neill, K.</b> , Smith, A. P., Smilek, D., & Seli, P. (2020). Dissociating the Freely-Moving Thought Dimension of Mind-Wandering from the Intentionality and Task-Unrelated Thought Dimensions. <i>Psychological Research</i> .	
	Seli, P., <b>O'Neill, K.</b> , Carriere, J. S., Smilek, D., Beaty, R. E., & Schacter, D. L. (2020). Mind-wandering across the age gap: Age-related differences in mind-wandering are partially attributable to age-related differences in motivation. <i>The Journals of Gerontology: Series B</i> .	

**O'Neill, K.**, & De Brigard, F. (2019). Two challenges for a dual system approach to temporal cognition [Commentary on "Thinking in and about Time: A Dual Systems Perspective on Temporal Cognition" by Hoerl, C. and McCormack, T.]. *Brain and Behavioral Sciences*, 1–77.

Govindarajulu, N. S. and Bringsjord, S. and Sen, A. and Paquin, J. C. and **O'Neill, K.** (2018). Ethical Operating Systems. In De Mol, Liesbeth and Primiero, Giuseppe (Ed.), *Reflections on Programming Systems: Historical and Philosophical Aspects* (Vol. 133, pp. 235–260). Cham: Springer.

Bringsjord, S., & **O'Neill, K.** (In Press). Third-millennium computational logic. *Minds and Machines*.

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**Conference  
Papers**

Yin, S., **O'Neill, K.**, Brady, T., & De Brigard, F. (2019). The Effect of Category Learning on Recognition Memory: A Signal Detection Theory Analysis. In *Proceedings of the 41st Annual Meeting of the Cognitive Science Society*.

Bello, P., **O'Neill, K.**, & Bridewell, W. (2019). Artificial Agency Requires Attention: The Case of Intentional Action. In *AAAI Spring Symposium: Towards Conscious AI Systems*.

**O'Neill, K.**, Bridewell, W., & Bello, P. (2018). Time-Based Resource Sharing in ARCADIA. In *Proceedings of the 40th Annual Meeting of the Cognitive Science Society*.

Bello, P., Lovett, A., Briggs, G., & **O'Neill, K.** (2018). An Attention-Driven Model of Human Causal Reasoning. In *Proceedings of the 40th Annual Meeting of the Cognitive Science Society*.

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**Presentations**

Khoudary, M., Hanna, E.K., **O'Neill, K.G.**, Iyengar, V., Clifford, S., Cabeza, R., De Brigard, F., Sinnott-Armstrong, W. (2020). "A Functional Neuroimaging Investigation of Moral Foundations Theory". *2020 meeting of the Cognitive Neuroscience Society*.

Smith, A., **O'Neill, K.**, Smilek, D., Seli, P. (2019) "On the Utility of the Dynamic Framework of Mind Wandering". *Psychonomics*.

Yin, S., **O'Neill, K.**, Brady, T., De Brigard, F. (2019) "The Effect of Category Learning on Recognition Memory: A Signal Detection Theory Analysis". *41st Annual Meeting of the Cognitive Science Society*.

Bello, P., **O'Neill, K.**, Bridewell, W. (2019). "Artificial Agency Requires Attention: The Case of Intentional Action". In *AAAI Spring Symposium: Towards Conscious AI Systems*.

Lovett, A., Briggs, G., **O'Neill, K.**, Bello, P. (2018). "Strategic Deployment of Attention in Online Causal Judgment: A Computational Model". *Journal of Vision*, 18(10), 741-741.

**O'Neill, K.**, Bridewell, W., Bello, P. (2018) "Time-Based Resource Sharing in ARCADIA". *40th Annual Meeting of the Cognitive Science Society*.

Bello, P., Lovett, A., Briggs, G., **O'Neill, K.** (2018) "An Attention-Driven Model of Human Causal Reasoning". *40th Annual Meeting of the Cognitive Science Society*.

**O'Neill, K.**, Bringsjord, S. "Solving the Lottery Paradox in a Cognitive Calculus". (2016) *International Association for Computing and Philosophy*.

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<b>Awards/ Honors</b>	NSF GRFP Honorable Mention Duke Chancellors Scholars Fellowship Undergraduate Research Program Rensselaer Leadership Award Mona & Edward Zander '68 Scholarship Dean's List/Dean's Honor List	Spring 2019 Fall 2018 Spring 2015 - Spring 2017 Fall 2014 - Spring 2017 Fall 2014 - Spring 2017 Fall 2014 - Spring 2017
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<b>Projects</b>	<b>SpikingNeuralNets.jl</b> A flexible system for simulating arbitrary systems of spiking neural networks. <b>ARCADIA</b> A computational framework for attention-centered cognitive modeling. <b>MetaProver</b> A framework for automated logical and meta-logical reasoning via analytic tableaux <b>OSCAR</b> A restoration of John Pollock's nonmonotonic natural deduction theorem prover		
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<b>Skills</b>	<b>Programming</b> Python, R, C/C++, Java/Javascript, Clojure/Scheme/Lisp, Julia, MATLAB, HTML/CSS, Prolog, Unix, Git, L <sup>A</sup> T <sub>E</sub> X <b>Data Collection/Analysis</b> Behavioral, fMRI, eye tracking data Mixed-effect modeling, Bayesian statistics, multivariate statistics <b>Artificial Intelligence</b> Cognitive modeling, ML, Symbolic AI, NLP, Parallel/High-Performance Computing <b>Engineering</b> Software development, verification, and visualization <b>Languages</b> German (intermediate)		
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<b>References</b>	<b>Felipe De Brigard, Ph.D.</b> <i>Associate Professor</i> Philosophy Psychology & Neuroscience Center for Cognitive Neuroscience Duke University felipe.debrigard@duke.edu (919) 660-3028	<b>John Pearson, Ph.D.</b> <i>Assistant Professor</i> Biostatistics & Bioinformatics Psychology & Neuroscience Electrical and Computer Engineering Center for Cognitive Neuroscience Duke University john.pearson@duke.edu (919) 613-8338	
	<b>Paul Bello, Ph.D.</b> <i>Section Head</i> Intelligent Systems Naval Center for Applied Research in Artificial Intelligence Information Technology Division U.S. Naval Research Laboratory paul.bello@nrl.navy.mil		