

Minjung Kim

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Professional Experience

- 2019- **Postdoctoral Researcher**
Dr. Rafal Mantiuk, Rainbow Group, University of Cambridge
- 2017-2019 **Postdoctoral Researcher**
Dr. Marianne Maertens, Fachgruppe Modellierung kognitiver Prozesse, Technische Universität Berlin
- 2016-2017 **Postdoctoral Researcher**
Dr. Richard Murray, York University Centre for Vision Research, Toronto
- 2005-2009 **Laboratory Manager**
Dr. Ronald Rensink, Visual Cognition Lab, University of British Columbia

Education

- 2016 **Doctor of Philosophy in Experimental Psychology (Cognition and Perception Program) with Minor in Quantitative Psychology**
Dr. Laurence Maloney, New York University
Dr. Richard Murray, York University, Toronto
· Dissertation: Mid-Level Vision for the Perception of Lighting
- 2014 **Master of Arts in Psychology (Cognition and Perception Program) (part of PhD)**
Dr. Laurence Maloney, New York University
· First-year paper: Lightness Constancy by Interpolation under Simple and Complex Light Fields
· Second-year paper: The Perception of Lighting as Sampling and Interpolation
- 2011 **Master of Arts in Psychology (Brain, Behaviour, and Cognitive Sciences Program)**
Dr. Richard Murray, York University, Toronto
· Thesis: Shape and Luminance Cues for the Visual Perception of Glow
- 2008 **Bachelor of Science in Cognitive Systems (Brain and Cognition Stream)**
Dr. Ronald Rensink, University of British Columbia
· Project: Design Principles in Navigation

Publications

Journal Articles

Desimone, K., **Kim, M.**, & Murray, R. F. (in press). Numerosity adaptation can be dissociated from density adaptation. *Psychological Science*.

Wuerger, S., Ashraf, M., **Kim, M.**, Martinovic, J., Perez-Ortiz, M. & Mantiuk, R. (2020). Spatio-chromatic contrast sensitivity under mesopic and photopic light levels. *Journal of Vision*, 20(4):23, 1-26. doi: 10.1167/jov.20.4.23.

Kim, M., Gold, J. M. & Murray, R. F. (2018). What image features guide lightness perception? *Journal of Vision*. 18(13):1. doi: 10.1167/18.13.1.

Kim, M., Wilcox, L. M. & Murray, R. F. (2016). Perceived 3D shape toggles perceived glow. *Current Biology*. 26(9), 350-351. Featured on YFile:
<http://yfile.news.yorku.ca/2016/05/10/study-finds-visual-perception-of-glow-can-be-toggled-on-and-off/>

Conference Talks

Wuerger, S., Ashraf, M., Mantiuk, R. K., **Kim, M.**, and Martinovic, J. (2019). Luminance and Chromatic Contrast Sensitivity at an Extended Luminance Range. Oral Presentation at the 25th Symposium of the International Colour Vision Society (ICVS), 5-9 July 2019, Riga, Latvia. <https://www.icvs2019.lu.lv/>

Kim, M., Aguilar, G. & Maertens, M. (2018). Michelson contrast for transparency perception in scenes with multiple

- luminances. *Computational and Mathematical Models in Vision (Modvis)*. St. Pete Beach, Florida, USA. May 16-18, 2018.
- Maertens, M., **Kim, M.** & Aguilar, G. (2018). A contrast-based model of achromatic transparency. *Computational and Mathematical Models in Vision (Modvis)*. St. Pete Beach, Florida, USA. May 16-18, 2018.
- Kim, M.**, Gold, J. M. & Murray, R. F. (2018). What visual features are important to lightness perception? *Scottish Vision Group Meeting*. Glencoe, UK. March 16-18, 218.
- Murray, R. F., **Kim, M.** & Gold, J. M. (2017). A reverse correlation test of computational models of lightness perception. *Computational Cognitive Neuroscience*. New York, NY. September 6-8, 2017.
- Kim, M.**, Gold, J. M. & Murray, R. F. (2017). Classification images for understanding lightness perception. *European Conference on Visual Perception*. Berlin, Germany. Aug. 27-31, 2017.
- Murray, R. F, Desimone, K. & **Kim, M.** (2017). How do we count at a glance? *Annual Meeting of the Vision Sciences Society*. St. Pete Beach, Florida, USA. May 19-24, 2017.
- Kim, M.**, Gold, J. M. & Murray, R. F. (2017). Using classification images to understand models of lightness perception. *Computational and Mathematical Models in Vision (Modvis)*. St. Pete Beach, Florida, USA. May 17-19, 2017.
- Murray, R. F., Wilder, J. D., & **Kim, M.** (2016). Human vision uses a flexible model of lighting variations. *European Conference on Visual Perception*. Barcelona, Spain, August 28 - September 1, 2016.
- Kim, M.**, Wilcox, L. M. & Murray, R. F. (2016). Perceived 3D shape toggles perceived glow. *Annual Meeting of the Vision Sciences Society*. St. Pete Beach, Florida, USA. May 13-18, 2016.
- Kim, M.** (2016). Perceived 3D shape toggles perceived glow. *Second Annual Student Research Symposium of the Neuroscience Association at York*. Toronto, Canada. March 4, 2016.
- Murray, R. F. & **Kim, M.** (2015). Lightness constancy via Bayesian anchoring. *Annual Interdisciplinary Conference*. Jackson Hole, Wyoming, USA. February 1-6, 2015.
- Kim, M.** & Murray, R. F. (2011). 3D surface shape and the appearance of glow. *Annual Meeting of the Vision Sciences Society*. Naples, Florida, USA. May 6-11, 2011.

Conference Abstracts

- Ashraf, M., Wuerger, S. M., Mantiuk, R. K., **Kim, M.**, Saunderson, H., and Martinovic, J. (2019). Age-related changes in spatio-chromatic contrast sensitivity at mesopic and photopic light levels. Poster Presentation at *Women in Vision UK Meeting*, 13 December 2019, Belfast, UK. Retrieved from <https://www.networkuk.com/Home/WomenInVision>
- Ashraf, M., Wuerger, S., Mantiuk, R. K., **Kim, M.**, and Martinovic, J. (2019). Luminance and chromatic contrast sensitivity for extended range of light levels. Poster Presentation at *Liverpool Neuroscience Day (LND)*, 14 June 2019, Liverpool, UK. <https://lng.org.uk/event/lnd2019/>
- Ashraf, M., Wuerger, S. M., Mantiuk, R. K., **Kim, M.**, & Martinovic, J. (2019). Luminance-dependent spatio-chromatic sensitivity: from detection to appearance. Poster Presentation at *Leeds Colour Conference*, 29-30 July 2019, Leeds, UK. <http://stephenwestland.co.uk/colour2019/>
- Kim, M.**, Aguilar, G. & Maertens, M. Understanding the reduction in Michelson contrast for the perception of transparency. Presented at the *European Conference on Visual Perception*. Trieste, Italy. August 26-31, 2018.
- Aguilar, G., **Kim, M.** & Maertens, M. Estimating perceived transparency using conjoint measurement. Presented at the *European Conference on Visual Perception*. Trieste, Italy. August 26-31, 2018.
- Kim, M.**, Gold, J. M. & Murray, R. F. Classification images for understanding lightness perception. Presented at *Centre for Vision Research International Conference on Vision in the Real World*. Toronto, Canada. June 13-16, 2017.
- Kim, M.**, Wilcox, L.M. & Murray, R. F. Perceived 3D shape toggles perceived glow. Presented at the *Perception Representation, Illumination, Shape, and Material Workshop*. Schloss Rauischholzhausen, Germany. October 19-23, 2016.
- Kim, M.**, Gold, J. M. & Murray, R. F. Classification images reveal that local grouping within lighting frameworks drives the argyle illusion. Presented at *Centre for Vision Research International Conference on Perceptual Organization*. Toronto, Canada. June 23-26, 2015.

- Kim, M.**, Gold, J. M. & Murray, R. F. Classification images reveal that local grouping within lighting frameworks drives the argyle illusion. Presented at the *Annual Meeting of the Vision Sciences Society*. St. Pete's Beach, Florida, USA. May 15-20, 2015.
- Kim, M.**, Ng, K. & Maloney, L.T. Light field interpolation across an insulating white border. Presented at the *Annual Meeting of the Vision Sciences Society*. St. Pete's Beach, Florida, USA. May 16-21, 2014.
- Kim, M.** & Maloney, L. T. Interpolation of illuminant cues across scenes with light fields induced by a mixture of a proximal and a collimated light source. Presented at the *European Conference on Visual Perception*. Bremen, Germany. August 25-29, 2013.
- Kim, M.**, Schüür, F. & Maloney, L. T. Interpolation of illuminant cues across scenes with light fields induced by a mixture of a proximal and a collimated light source. Presented at *Centre for Vision Research International Conference on Interactions in Vision*. Toronto, Canada. June 26-29, 2013.
- Kim, M.** & Murray, R. F. The influence of shape on perceived glow. *Centre for Vision Research International Conference on Plastic Vision*. Toronto, Canada. June 15-18, 2011.
- Kim, M.** & Murray, R. F. Glow from shape and shape from glow. *Workshop on the Perception of Material Properties*, Schloss Rauschholzhausen, Germany. June 1-5, 2011.
- Kim, M.** and Rensink, R. A. Image transitions: the invariance of mental representations to visual transformations. *Banff Annual Seminar in Cognitive Science*, Banff, Canada. May 2-3, 2008.
- Chao, W.O., Ha, D., Ho, K., Kaastra, L., **Kim, M.**, Wade, A. & Fisher, B. The Bricolage. *IEEE Symposium on Visual Analytics Science and Technology*, Sacramento, California, USA. Oct. 30-Nov. 1, 2007.
- Ha, D., **Kim, M.**, Wade, A., Chao, W.O., Ho, K., Kaastra, L., Fisher, B. & Dill, J. From tasks to tools: A field study in collaborative visual analytics. *IEEE Symposium on Visual Analytics Science and Technology*, Sacramento, California, USA. Oct. 30-Nov. 1, 2007.

Scholarly Activity

Academic Community Service

- 2019** **Conference Co-organizer**
 Scottish Vision Group Meeting, Isle of Skye, Scotland
 · Proposed and organized a panel discussion on virtual reality and the future of vision research
 · Obtained sponsorship funding from MDPI Vision and Facebook Reality Labs (Oculus)
- 2013-** **Journal and Conference Reviewer**
 Cross-disciplinary: PLOS One
 Psychology: Journal of Vision, Attention, Perception & Psychophysics
 Computer science: IEEE Visualization, ACM Symposium on Applied Perception

Teaching Experience

- 2014-2015** **Teaching Assistant, Graduate Level**
 Computer Programming for Experimental Psychology (2014-2015, Term 1)
 Statistical Modelling of Perception and Cognition (guest lecturer)
- 2007-2010** **Teaching Assistant, Undergraduate Level**
 Undergraduate Statistics (2010, Term 1)
 Perception (2009-2010, Term 2; 2013-2014, Term 1)
 Research Methods in Cognitive Systems (2008-2009, Term 1)
 Introduction to Cognitive Systems (2007-2008, Term 1 & Term 2)
- 2009-2013** **Private Tutor**
 Introductory statistics (2009, 2011)
 Perception (2013)

Awards & Distinctions

Fellowships

- 2011-2016 **Henry M. MacCracken Award**, New York University
- 2011 **Presidential Fellowship (declined)**, Rutgers, the State University of New Jersey

Awards

- 2016 **Vision Sciences Society Student Travel Award**, Elsevier/*Vision Research*
- 2013 **Dean's Student Travel Grant**, New York University
- 2012 **Certificate of Academic Excellence**, Canadian Psychological Association
- 2011 **Thesis Prize Nomination**, York University
- 2009 **Graduate Student Entrance Scholarship**, York University
- 2008 **Quinn Research Travel Grants for Undergraduates**, University of British Columbia
- 2007 **Best Debriefing Award**, IEEE Symposium on Visual Analytics Science and Technology
- 2003-2004 **Dean's Honour Roll**, University of British Columbia
2006-2007
- 2003-2004 **Undergraduate Scholarship Program**, University of British Columbia

Course Participation by Competition or by Invitation

- 2014 **Computational Neuroscience: Vision**
Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, USA
- 2013 **Science Communication Workshop, Advanced Level**
Arthur L. Carter Journalism Institute, New York University, NY, USA
- 2008 **Vision Science Summer School**
York University Centre for Vision Research, Toronto, Canada

Public Engagement

Scientific Outreach

- 2016-2017 **Judge (Gr. 6/7 and 8/9 divisions)**
Toronto Science Fair
- 2013-2014 **Volunteer**
Neuroscience Outreach Group at NYU (NOGN)
- NYU Brain Fair, Brain Awareness Week
 - Elementary school and middle school outreach
 - American Museum of Natural History outreach

Popular Science Communication

Kim, M. (2015, June 26). Highlights from the 2015 Meeting of the Vision Sciences Society. *The Public Library of Science: Blogs: The Student Blog*. Retrieved from <http://blogs.plos.org/thestudentblog/2015/06/26/vssmeeting/>

Kim, M. (2014, Feb. 4). Not So Ordinary: A Tale of Unsung Scientific Heroes. [Review of the book *Ordinary Geniuses: How Tom Mavericks Shaped Modern Sciences*, by Gino Segre]. *The Public Library of Science: Blogs: The Student Blog*. Retrieved from <http://blogs.plos.org/thestudentblog/2014/02/04/ordinary-tale-unsung-science-heroes/>

Kim, M. (2013, Sept. 10). The Scientific Method: It's OK to Blunder. [Review of the book *Brilliant Blunders: from Darwin to Einstein: Colossal Mistakes by Great Scientists That Changed Our Understanding of Life and the Universe*, by Mario Livio]. *The Public Library of Science: Blogs: The Student Blog*. Retrieved from <http://blogs.plos.org/thestudentblog/2013/09/10/the-scientific-method-its-ok-to-blunder/>

References

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