

Farahnaz Ahmed Wick

CONTACT INFORMATION	Brigham & Women's Hospital, HMS Visual Attention Lab 65 Landsdowne st, 4th floor Cambridge, MA 02139	farahnaz@gmail.com www.farahnazwick.com
RESEARCH INTERESTS	Visual search, Working memory, Multiple object tracking, Eye movements, Modeling attention with dnns	
EDUCATION	University of Massachusetts Boston , Boston, MA Ph.D./ M.S., Computer Science, Dec 2016 <ul style="list-style-type: none">• Dissertation: <i>Top-down and bottom-up biases in visual attention</i>• Master's Thesis: <i>Filling in the details: Perceiving from low fidelity visual input</i>• Advisor: Marc Pomplun Mount Holyoke College , South Hadley, MA M.A., Psychology, May 2009 <ul style="list-style-type: none">• Thesis: <i>Egocentric distance perception and presence in virtual environments</i>• Advisors: Joseph D. Cohen, Katherine S. Binder, Claude Fenemma B.A., Computer Science, Physics, GPA 3.46/4.0 with High Honors, May 2006 <ul style="list-style-type: none">• Honors Thesis: <i>Effect of depth of field on perceived visual realism of images</i>• Advisor: Claude Fenemma	
RESEARCH EXPERIENCE	Postdoctoral Research Fellow Brigham & Women's Hospital, Harvard Medical School, MIT Visual Attention Lab, Center for Brains, Minds & Machines Advisors: Jeremy M. Wolfe, Gabriel Kreiman	2016 to Present
	Student Brains, Minds & Machines summer course, Advisor: Josh Tenenbaum Project: Deep Q networks take Physics 101	August 2017
	Visiting Student Visual Attention Lab, Brigham & Women's Hospital, Harvard Medical School Advisor: Jeremy M. Wolfe	May 2015 to May 2016
	Research Assistant Visual Attention Lab, University of Massachusetts Boston Advisor: Marc Pomplun	May 2010 to Dec 2016
	Research Assistant Vision Lab, Harvard University	Sep 2009 to May 2010
	Research Assistant Department of Psychology, Mount Holyoke College	Sep 2006 to Aug 2009

PUBLICATIONS

1. **Wick, F.A.**, Kreiman, G., Wolfe, J.M. (in prep). “Computational strategies in hybrid visual search.”
2. Aizenman, A., Ehinger, K., **Wick, F.A.**, Wolfe, J.M. (in prep). “Using a Genetic Algorithm to explore shape space: Evolving the difficulty of visual search for shape.”
3. **Wick, F.A.**, Alaoui Soce, A., Wolfe, J.M. (2019). “Perception of dynamic scenes: What is your Heider Capacity?”
4. **Wick, F.A.**, Pomplun, M. (in review). “Semantic bias in visual working memory.”
5. **Wick, F.A.**, Garaas, T.W., Pomplun, M. (2016). “Saccadic adaptation alters the attentional field.” *Frontiers in human neuroscience*.
6. **Wick, F.A.**, Wick, M.L., Pomplun, M. (2016). “Filling in the details: Perceiving from low-fidelity visual input.” *CoRR*.
7. Wu, C., **Ahmed Wick, F.**, Pomplun, M. (2014). “Guidance of visual attention by semantic information in real-world scenes.” *Frontiers in psychology*.
8. **Ahmed, F.**, Cohen, J.D., Binder, K.S., Fennema, C.L. (2010). “Influence of tactile feedback and presence on egocentric distance perception in virtual environments.” *IEEE Virtual Reality*. One of the eight full papers accepted.

TALKS & POSTERS

1. **Wick, F.A.** (Mar 16, 2019). “Seeing through the mind’s eye: An exploration of visual attention in dynamic scenes.” Invited talk at Museum of Science Boston during Brain Awareness Week.
2. **Wick, F.A.**, Kreiman, G, Wolfe, J.M. (2019). “A computational model of hybrid visual search.” Talk given at MBB Faculty Retreat.
3. **Wick, F.A.**, Kreiman, G, Wolfe, J.M. (2018). “A computational model of hybrid visual search.” Talk given at Annual CBMM Retreat.
4. **Wick, F.A.**, Wolfe, J.M. (2018). “Two targets in memory can guide search, four targets cannot.” Poster at Annual Vision Sciences Society Meeting.
5. **Wick, F.A.**, Wolfe, J.M. (2017). “Multiple object tracking does not care if you are crossing the street or bouncing off the wall.” Talk at Annual Vision Sciences Society Meeting.
6. **Wick, F.A.**, Wolfe, J.M. (2016). “Perception of dynamic scenes: Rethinking tracking capacities” Seminar talk at Department of Psychology, Franklin & Marshall college.
7. **Wick, F.A.**, Wick, M.L., Pomplun, M. (2016). “Filling in the details: Perceiving from low-fidelity visual input.” Seminar talk at Visual Attention lab, BWH/Harvard Medical School.
8. **Wick, F.A.**, Garg, S., Alaoui Soce, A., Wolfe, J.M. (2016). “Perception of dynamic scenes: What is your Heider Capacity?” *Psychonomics*.
9. **Wick, F.A.**, Garg, S., Alaoui Soce, A., Wolfe, J.M. (2016). “Perception of dynamic scenes: What is your Heider Capacity?” Talk given at Annual Vision Sciences Society Meeting.
10. **Ahmed Wick, F.**, Pomplun, M. (2015). “The semantic advantage in object memorization.” Annual Vision Sciences Society Meeting.

11. **Ahmed Wick, F.**, Saura, L., Wu, C., Pomplun, M. (2014). "Semantic bias in visual working memory." Annual Vision Sciences Society Meeting.
12. **Ahmed Wick, F.**, Saura, L., Wu, C., Pomplun, M. (2014). "Semantic bias in visual working memory." Cognitive Neuroscience Society.
13. **Ahmed Wick, F.**, Garaas, T.W., Pomplun, M. (2013). "Saccadic adaptation modulates inhibition of return." Annual Vision Sciences Society Meeting.
14. **Ahmed Wick, F.**, Eglinton, L., Garaas, T.W., Pomplun, M. (2011). "Saccadic adaptation alters the attentional field." Talk given at European Conference on Eye Movements, Marseille.
15. **Ahmed, F.**, Hwang, A.D., Walsh, E.M., Pomplun, M. (2010). "Conspicuity of object features determines local versus global mental rotation strategies." Annual Vision Sciences Society Meeting.

AWARDS	<ul style="list-style-type: none"> • MBB Award • HBI Young Scientist Development Award • First prize in Graduate research colloquium, UMass Boston • Harap Scholarship • Mary Lyon Scholar • Sigma Xi 	<p>June 2018</p> <p>Feb 2018</p> <p>May 2016</p> <p>Sep 2007</p> <p>May 2006</p> <p>May 2006</p>
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TEACHING EXPERIENCE	<p>Teaching Assistant</p> <p>CS 670 - Artificial Intelligence Department of Computer Science, University of Massachusetts Boston</p> <p>Teaching Assistant</p> <p>CS 320 - Discrete Math Department of Computer Science, University of Massachusetts Boston</p> <p>Lecturer</p> <p>CS 105 - Introduction to Computer Science Department of Computer Science, University of Massachusetts Boston</p> <p>Lab Instructor</p> <p>PSYCH 200 - Research Methods Instructor: Amber Douglas Department of Psychology, Mount Holyoke College</p>	<p>Spring 2016</p> <p>Fall 2015, Spring 2015</p> <p>Fall 2009, Spring 2010</p> <p>Fall 2006, Spring 2007</p>
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SKILLS	<ul style="list-style-type: none"> • Languages and software: Matlab, Python, Javascript, HTML, PHP, C++, C, Java, SPSS, MySQL, Mathematica, BrainVoyager, Blender, Maya, Povray, Gimp • Foreign languages: Bengali, Hindi
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