

Curriculum Vitae

Jacqueline M. Fulvio

Doctoral Student
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Education

Ph.D. (candidate)	New York University	2009 (anticipated)
	<i>Psychology: Cognition & Perception</i>	Minor: Quantitative Psychology
M.A.	New York University	2006
	<i>Psychology: Cognition & Perception</i>	
B.A.	Rutgers University, New Brunswick	2004
	<i>Psychology (cum laude with distinction in Major)</i>	Minor: Biological Sciences
	Thesis: <i>The role of curvature on shapes extrapolated behind occluders.</i>	

Professional & Research Positions

2008	Instructor, Department of Psychology, New York University
2007	Instructor, Department of Psychology, New York University
2005	Teaching Assistant, Department of Psychology, New York University
2004	Teaching Assistant, Department of Psychology, New York University
2003-2004	Research Assistant (for Dr. Manish Singh), Department of Psychology, Rutgers University

Research Interests

- Computational and psychophysical study of visual object and surface representations under conditions of occlusion, camouflage, and transparency
- Motor planning and response towards objects when overcoming uncertainty
- Computation of environmental statistics when planning and executing motor responses
- Mathematical/statistical modeling of visual processing of occluded contours

Awards, Honors & Fellowships

- Douglas & Katherine Fryer Thesis Fellowship, 2008
- Student Travel Award, Vision Sciences Society, 2007
- Graduate Research Fellowship, National Science Foundation, 2006-present
- Graduate School of Arts & Sciences Travel Award, New York University, 2005
- MacCracken Graduate Fellowship, New York University, 2004-present
- Phi Beta Kappa, Rutgers University Chapter, 2004-present
- Psi Chi, Rutgers University Chapter, 2003-present
- National Society of Collegiate Scholars, Rutgers University Chapter, 2001-present
- Rutgers University Alumni Merit Award, Rutgers University Alumni Association, 2002
- Rutgers University Outstanding Scholar Award, Rutgers University, 2000-2004
- Bloustein Scholar Merit Award, The State of New Jersey, 2000-2003

Professional Service

Professional Affiliations

Vision Sciences Society
Cognitive Sciences Society

Journals Reviewed For

Journal of Vision
Perception
Vision Research

University Service

Student Brown Bag Coordinator, Fall 2006-Spring 2007

Publications

Journal Articles

- a. **Fulvio, J.M.**, Hudson, T.E., & Maloney, L.T. Motor extrapolation of spatiotemporal contours. (In preparation).
- b. Singh, M., **Fulvio, J.M.**, & Maloney, L.T. Visual grouping and interpolation of contours and surfaces. (In preparation).
1. Fulvio, J. M., Singh, M., & Maloney, L. T. (2009). An experimental criterion for consistency in Interpolation of partly occluded contours. *Journal of Vision*, 9(4):5, 1-19, <http://journalofvision.org/9/4/5/>, doi:10.1167/9.4.5. [[Article](#)]
2. **Fulvio, J.M.**, Singh, M., & Maloney, L.T. (2008). Precision and consistency of contour interpolation. *Vision Research*, 48(6), 831-849.
3. Singh, M. & **Fulvio, J.M.** (2007). Bayesian contour extrapolation: Geometric determinants of good continuation. *Vision Research*, 47, 783-798.
4. **Fulvio, J.M.** & Singh, M. (2006). Surface geometry influences the shape of illusory contours. *Acta Psychologica*, 123, 20-40.
5. Fulvio, J.M., Singh, M., & Maloney, L.T. (2006). Combining achromatic and chromatic cues to transparency. *Journal of Vision*, 6(8), 760-776. [[Abstract](#)] [[Article](#)]
6. Singh, M. & **Fulvio, J.M.** (2005). Visual extrapolation of contour geometry. *Proceedings of the National Academy of Sciences*, 102(3), 939-944.

Conference Proceedings (Refereed)

1. **Fulvio, J.M.**, Singh, M., & Maloney, L.T. (2006). Testing the relatability hypothesis: Inducer offset, not turning angle, is critical for visual interpolation. *Visual Cognition (Object Perception, Attention, and Memory (OPAM) 2006 Conference Report)*, 15(1), 83-87.
2. **Fulvio, J.M.**, Singh, M., & Maloney, L.T. (2006). Consistency of location and gradient judgments of visually-interpolated contours. *Computer Vision and Pattern Recognition, Proceedings*.
3. Singh, M., & **Fulvio, J.M.** (2006). Contour extrapolation using probabilistic cue combination.

Computer Vision and Pattern Recognition, Proceedings.

Talks

Perceptual Science Series, Dept of Psychology & Center for Cognitive Science (Spring, 2008)

Rutgers University, New Brunswick, NJ

Cognition & Perception Student Brown Bag Talk, Department of Psychology (Fall, 2007)

New York University, New York, NY

Spatial Cognition & Computation Forum, Department of Psychology (Spring, 2007)

University of Texas, Austin, TX

Cognition & Perception Colloquium, Department of Psychology (Fall, 2006)

New York University, New York, NY

Cognition & Perception Student Brown Bag Talk, Department of Psychology (Spring, 2006)

New York University, New York, NY

Human and Computer Vision Series, Dept of Psych & Center for Cognitive Science (Fall, 2005)

Rutgers University, New Brunswick, NJ

Cognition & Perception Student Brown Bag Talk, Department of Psychology (Fall, 2004)

New York University, New York, NY

Conference & Workshop Presentations

Fulvio, J.M., Schrater, P.R., & Maloney, L.T. (2009). Reduced sampling of dynamic trajectories does not increase extrapolation bias. *Annual meeting of the Vision Sciences Society (VSS)*.

Fulvio, J.M., Hudson, T.E., & Maloney, L.T. (2008). Motor extrapolation of occluded spatiotemporal contours. *Annual meeting of the Vision Sciences Society (VSS)*.

Fulvio, J.M., Singh, M., & Maloney, L.T. (2007). Location and orientation judgments within the Poggendorff configuration are inconsistent. 15th annual conference on Object Perception, Attention, and Memory (OPAM).

Fulvio, J.M., Singh, M., & Maloney, L.T. (2007). Breakdown of contour interpolation: Testing a multiple-contours hypothesis. *Annual meeting of the Vision Sciences Society (VSS)*.

Fulvio, J.M., Singh, M., & Maloney, L.T. (2006). Testing the reliability hypothesis: Inducer offset, not turning angle, is critical for visual interpolation. 14th annual conference on Object Perception, Attention, and Memory (OPAM).

Fulvio, J.M., Singh, M., & Maloney, L.T. (2006). Consistency of location and gradient judgments of visually-interpolated contours. IEEE Computer Society meeting on

Computer Vision and Pattern Recognition (Workshop on Perceptual Organization in Computer Vision).

Singh, M., & **Fulvio, J.M.** (2006). Contour extrapolation using probabilistic cue combination.

IEEE Computer Society meeting on *Computer Vision and Pattern Recognition (Workshop on Perceptual Organization in Computer Vision).*

Fulvio, J.M., Singh, M., & Maloney, L.T. (2006). The human visual spline: Interpolation contours between reliable inducers follow quintic polynomials. *Annual meeting of the Vision Sciences Society (VSS).*

Fulvio, J.M., Singh, M., & Maloney, L.T. (2005). Investigating the chromatic and achromatic components of perceived transparency. 13th annual conference on Object Perception, Attention, and Memory (OPAM).

Fulvio, J.M., Singh, M., & Maloney, L.T. (2005). Combining the chromatic and achromatic components of perceived transparency. *Annual meeting of the Vision Sciences Society (VSS).*

Singh, M. & **Fulvio, J.M.** (2005). Testing the limits of good continuation: Does human vision extrapolate rate of change of curvature? *Annual meeting of the Vision Sciences Society (VSS).*

Fulvio, J.M. & Singh, M. (2004). The role of surface versus contour geometry in illusory-contour synthesis. 12th annual conference on Object Perception, Attention, and Memory (OPAM).

Singh, M. & **Fulvio, J.M.** (2004). Visual extrapolation of contour shape: The role of curvature. *Annual meeting of the Vision Sciences Society (VSS).*

Teaching

Instruction

Statistical Reasoning for the Behavioral Sciences (Summer 2008, NYU)

Statistical Reasoning for the Behavioral Sciences (Summer 2007, NYU)

TA

Cognitive Neuroscience (for Prof. Clayton Curtis, Fall, 2005, NYU)

Statistical Reasoning for the Behavioral Sciences (for Prof. Elizabeth Bauer, Fall, 2004, NYU)

Advising

High School Students Supervised in Preparation for Intel Science Talent Search

Lindy Zhang (2007-2008)

Jenny Chung (2007-2008)

Workshop Attendance

European Summer School for Visual Neuroscience, Germany, September 3-15, 2006

Relevant Coursework

Attention (*Professor Marisa Carrasco*)

Cognitive Neuroscience (*various NYU Psychology & Neuroscience faculty*)

Intermediate Statistics (*Professor Laurence T. Maloney*)

Linear Algebra (*Independent Course through Courant Institute of Mathematical Sciences and Professor Laurence T. Maloney*)

Mathematical Statistics (*through Courant Institute of Mathematical Sciences with Professor Simeon Berman*)

Multivariate Statistics (*Professor Laurence T. Maloney*)

Perception (*Professor Michael S. Landy*)

Probability Theory (*Independent Course through Courant Institute of Mathematical Sciences and Professor Laurence T. Maloney*)

Sensory and Motor Systems (*various NYU Center for Neural Science faculty*)

Simulation and Data Analysis (*Professor Laurence T. Maloney*)

Vector Calculus (*Independent Course through Courant Institute of Mathematical Sciences and Professor Laurence T. Maloney*)