

Steven L. Franconeri

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Education

2004	Harvard University	Ph.D. in cognitive psychology
2001	Harvard University	M.A. in cognitive psychology
1999	Rutgers University	B.A. in cognitive science and computer science

Research Postions

2006 - Present	Assistant Professor of Psychology, Northwestern University
2004 - 2006	Killam Postdoctoral Fellow, University of British Columbia
1999 - 2004	Graduate Student (NDSEG Fellowship), Harvard University Advisors: Daniel J. Simons & Ken Nakayama
1996 - 1999	Research Assistant, Rutgers University Advisor: Zenon Pylyshyn Designed and implemented visual attention experiments
1998	ATR Human Information Processing Labs, Kyoto, Japan Designed and programmed neural network systems
1997 - 1998	Research Assistant, Rutgers University. Advisor: Sven Dickinson Programmed shape recognition software

Academic Awards and Honors

2004-2006	Izaak Walton Killam Memorial Postdoctoral Fellowship
2001-2004	National Defense Science and Engineering Graduate Fellowship
2001	Harvard Certificate of Distinction in Teaching (Vision & Brain)
2000	Harvard Certificate of Distinction in Teaching (Cognitive Psych)
1999	Phi Beta Kappa & Golden Key National Honor Society
1995-1999	Rutgers College Dean's List
1997	Rutgers College Merit Scholarship

Publications

- Bebko, G.M., Franconeri, S.L., Ochsner, K.N., Chiao, J.Y. (submitted). Perceptual differences in the use of multiple emotion regulation strategies.
- Choo, H. Y. & Franconeri, S. L. (submitted). Average orientation is easier to compute for boundary features relative to surface features.
- Franconeri, S. L., Jonathan, S., & Scimeca, J. M. (submitted). Tracking multiple objects is limited only by spatial interference, not speed, time, or capacity.
- Franconeri, S. L., Scimeca, J. M., Roth, J. C., & Helseth, S. A. (submitted). Visual spatial relationship representation as a sequence of attentional shifts.
- Franconeri, S. L., Schurgin, M., Nelson, J., Ohira, H. & Chiao, J. Y. (submitted). Characteristic fixation patterns when judging different emotions in faces.
- Froberg, J. E. & Franconeri, S. L. (submitted). Interference between visual search and visual memory.
- Hollingworth, A., Simons D. J., & Franconeri, S. L., (submitted). New objects do not capture attention without a sensory transient.
- Iordanescu, L., Grabowecky, M., Franconeri, S. L., Theeuwes, J., & Suzuki, S. (submitted). Characteristic sounds make you look at targets faster in visual search.
- Franconeri, S. L., Alvarez, G. A., & Bemis, D. K. (under revision). It takes attention to capture attention.
- Alvarez, G. A. & Franconeri, S. L. (under revision). The allocation of visual short-term memory capacity: Evidence for a flexible storage mechanism.
- Choo, H. Y. & Franconeri, S. L. (in press). Visual size averaging of objects unavailable to conscious awareness. *Attention, Perception, & Psychophysics*.
- Franconeri, S. L., Bemis, D. K., & Alvarez, G. A. (2009). Number estimation relies on a set of segmented objects. *Cognition* 113, 1-13.
- Franconeri, S. L. (in press). Attention Capture. In Matsumoto, D. (Ed.), *The Cambridge Dictionary of Psychology*. Cambridge University Press.
- Brockmole, J. R. & Franconeri, S. L. (2009). Introduction to the special issue on Binding. *Visual Cognition*.
- Guzman-Martinez, E., Leung, P., Franconeri, S. L., Grabowecky, M., & Suzuki, S. (2009). Rapid eye-fixation training without eye tracking. *Psychonomic Bulletin & Review*. 16, 491-496.
- Hollingworth, A. & Franconeri, S. L. (2009). Object Correspondence across Brief Occlusion Is Established on the Basis of both Spatiotemporal and Surface Feature Cues. *Cognition*, 113, 150-166.

- Franconeri, S. L., Lin, J. Y., Pylyshyn, Z. W., Fisher, B. F., & Enns, J. T. (2008). Evidence against a speed limit in multiple object tracking. *Psychonomic Bulletin & Review* 15(4), 802-808.
- Lin, J., Franconeri, S. L., & Enns, J. T. (2008). Objects on a collision path with the observer demand attention. *Psychological Science* 19(7), 686-692.
- Alvarez, G. A. & Franconeri, S. L. (2007). How many objects can you track? Evidence for a resource-limited tracking mechanism. *Journal of Vision* 7(13), 1-10.
- Franconeri, S. L., Alvarez, G. A., & Enns, J. T. (2007). How many locations can you select? *Journal of Experimental Psychology: Human Perception & Performance* 33(5), 1003-1012.
- Simons, D. J., Mitroff, S. R., & Franconeri, S. L. (2006). Implicit and explicit representations in scene perception. In M. Peterson & G. Rhodes (Eds.), *Analytic and holistic processes in the perception of faces, objects, and scenes*.
- Franconeri, S. L., Hollingworth, A., & Simons, D. J. (2005). Do new objects capture attention? *Psychological Science*, 16(4), 275-281.
- Franconeri, S. L. & Simons, D. J. (2005). What dynamic signals capture attention: A reply to Abrams & Christ (2005). *Perception & Psychophysics* 67(6), 962-966.
- Franconeri, S. L., Simons, D. J., & Junge, J. A. (2004). Searching for stimulus-driven shifts of attention. *Psychonomic Bulletin & Review*, 11(5), 876-881.
- Franconeri, S. L. & Simons, D. J. (2003). Moving and looming stimuli capture attention. *Perception & Psychophysics*, 65(6), 1-12.
- Mitroff, S. R., Simons, D. J., & Franconeri, S. L. (2002). The siren song of implicit change detection. *Journal of Experimental Psychology: Human Perception and Performance*, 28(4), 798-815.
- Simons, D. J., Franconeri, S. L., & Reimer, R. L. (2000). Change blindness in the absence of a visual disruption. *Perception*, 29, 1143-1154.

Edited Volumes

- Brockmole, J. R., & Franconeri, S. L. (Eds.) (2009). *Binding: A Special Issue of the Journal Visual Cognition*. New York: Psychology Press.

Articles in preparation

- Franconeri, S. L., Xiao, X., & Bemis, D. K. (in preparation). Is similarity grouping feature selection?
- Roth, J. E. & Franconeri, S. L. (in preparation). Spatial relationships as a visual routine: Evidence from linguistic influences on perceptual judgment.
- Franconeri, S. L. (in preparation). The nature and status of visual resources. Oxford Handbook of Cognitive Psychology. Resberg, D. (Editor). Oxford University Press.

- Franconeri, S. L. & Alvarez, G. A. (in preparation). The magic number 4 in visual attention.
- Franconeri, S. L., Pylyshyn, Z. W., & Scholl, B. J. (in preparation). Spatiotemporal cues for tracking multiple objects through occlusion
- Franconeri, S. L., Helseth, S. A., Mok, P., Enns, J. T., & Alvarez, G. A. (in preparation). Mechanisms of multiple location selection: Wearing many Mexican hats.
- Schurigin, M., Iida, S., Nelson, J., Ohira, H., Franconeri, S. L., & Chiao, J. Y. (in preparation). Cultural and personality effects on emotional face judgments.
- Franconeri, S. L., Simons, D. J., & Alvarez, G. A. (in preparation). Gone in 16 milliseconds: The capacity limit of visual memory is not due to decay over time.

Presentations

- Franconeri, S. L., Jonathan, S., & Scimeca, J. M. (2009). Concurrent tracking of multiple objects is not limited by object speed. *Psychonomic Society, Boston MA.*
- Franconeri, S. L., & Roth, J. (2009). Spatial relationships as a visual routine: Evidence from linguistic influences on perceptual judgment. *Vision Sciences Society, Naples, FL.*
- Choo, H. & Franconeri, S. L. (2009). Average orientation is easier to compute for boundary features relative to surface features. *Vision Sciences Society, Naples, FL.*
- Wegbreit, E., Franconeri, S. L., & Jung-Beeman, M. (2009). Positive and anxious mood manipulations on selective visual attention. *Vision Sciences Society, Naples, FL.*
- Choo, H. & Franconeri, S. L. (2008). Visual averaging and object substitution masking. *Vision Sciences Society, Naples, FL.*
- Alvarez, G. A. & Franconeri, S. L. (2008). The magical number 4 in visual attention. *Vision Sciences Society, Naples, FL.*
- Franconeri, S. L., & Bemis, D. K. (2008). Similarity grouping is feature selection. *Vision Sciences Society, Naples, FL.*
- Lau, C., Franconeri, S. L., & Chiao, J. Y. (2008). Gazing at the Emotionally Expressive Side of a Face Makes You Appear More Socially Intelligent. *American Psychological Society, Chicago, IL.*
- Bebko, G.M., Chiao, J.Y. Franconeri, S.L. (2008). Identifying emotionally salient areas within complex scenes: Validation of an area-of-interest approach. *Midwestern Psychological Association, Chicago, IL.*
- Bebko, G.M., Franconeri, S.L., Ochsner, K.N., Chiao, J.Y. (2008). Perceptual differences in the use of multiple emotion regulation strategies. *Cognitive Neuroscience Society, San Francisco, CA.*
- Bebko, G.M., Franconeri, S.L., Ochsner, K.N., Chiao, J.Y. (2008). Sex differences in the use of multiple emotion regulation strategies. *Society for Personality and Social Psychology,*

Albuquerque, N.M.

- Hollingworth, A., & Franconeri, S. L. (2007). The role of surface features in establishing object correspondence across motion and occlusion. *Psychonomics* 2007.
- Franconeri, S. L. & Handy, T. C. (2007). Spatial relations are represented as a sequence over time: Evidence from electrophysiology. *Psychonomics* 2007.
- Franconeri, S. L. & Handy, T. C. (2007). Serial shifts of attention during spatial relationship judgments. *Vision Sciences* 2007.
- Lin, J., Franconeri, S. L., & Enns, J. T. (2007). Object action captures attention: A test of the behavioral threat hypothesis. *Vision Sciences* 2007.
- Chiao, J. Y. & Franconeri, S. L. (2007). Women, but not men, prefer to fixate on the right side of a face. *Vision Sciences* 2007.
- Nelson, J., Franconeri, S. L., & Chiao, J. Y. (2007). Looking for emotion in facial expressions: fixation patterns are emotion-specific. *Vision Sciences* 2007.
- Franconeri, S. L., Pylyshyn, Z. W., & Scholl, B. J. (2006). Spatiotemporal cues to object continuity across occlusion. *Vision Sciences* 2006
- Franconeri, S. L., Pylyshyn, Z. W., & Scholl, B. J. (2005). Tracking object identity across occlusion. *Object Perception & Memory* 2005.
- Franconeri, S. L., Alvarez, G. A., & Enns, J. (2005). How many locations can you select? *Vision Sciences* 2005.
- Bemis, D. K., Franconeri, S. L., & Alvarez, G. A. (2005). It takes attention to capture attention. *Vision Sciences* 2005.
- Alvarez, G. A., & Franconeri, S. L. (2005). How many objects can you track? *Vision Sciences* 2005.
- Franconeri, S. L., Alvarez, G. A., & Enns, J. (2004). The capacity limitations of spatial memory. *Object Perception & Memory* 2004.
- Bemis, D. K., Franconeri, S. L., & Alvarez, G. A. (2005). Rapid number estimation: A new paradigm for investigating the rules of objecthood. *Vision Sciences* 2004.
- Franconeri, S. L., Halberda, J. H., Feigenson, L., & Alvarez, G. A. (2004). The shape of attention around a common motion object. *Vision Sciences* 2004.
- Franconeri, S. L., Hollingworth, A., & Simons, D. J. (2003). Do new objects capture attention? *Object Perception & Memory* 2003.
- Franconeri, S. L., & Simons, D. J. (2003). Searching for stimulus-driven attention capture. *Vision Sciences* 2003.
- Franconeri, S. L., & Simons, D. J. (2002). Attention capture can occur without top-down influences. *Vision Sciences* 2002.

Franconeri, S. L., & Simons, D. J. (2002). Salvaging attention capture. *Eastern Psychological Association* 2002.

Franconeri, S. L., & Simons, D. J. (2001). Not just abrupt onset: Disoccluding and looming objects capture attention. *Vision Sciences* 2001.

Franconeri, S. L., & Simons, D. J. (2000). Detecting gradual changes to simple displays. *Object Perception & Memory* 2000.

Franconeri, S. L., & Simons, D. J. (2000). The role of abstract representations and motion signals in change detection. *Association for Research in Vision and Ophthalmology* 2000.

Invited talks

August 2009	Temasek Labs \ Nat. U. Singapore	<i>Departmental Colloquium</i>
August 2009	Nanyang Technological University	<i>Departmental Colloquium</i>
April 2009	University of Iowa	<i>Cognitive Psychology</i>
Oct 2008	Duke University	<i>Cognitive & Neuroscience</i>
May 2008	Midwestern Psych. Assoc.	<i>Invited Talk</i>
Sept 2007	Notre Dame University	<i>Cognitive Psychology</i>
July 2007	Peking University, Beijing	<i>Cognitive Psychology</i>
July 2007	Beijing Normal University	<i>Cognitive Psychology</i>
May 2007	Vrije University, Amsterdam	<i>Dept. of Psychology Cognitive Group</i>
April 2007	Univ Illinois Urbana-Champaign	<i>Cognitive Psychology</i>
April 2007	University of Chicago	<i>Cognitive Psychology</i>
Mar 2006	Northwestern University	<i>Departmental Colloquium</i>
Mar 2006	Cornell University	<i>Departmental Colloquium</i>
Feb 2006	University of Wisconsin, Madison	<i>Departmental Colloquium</i>
Jan 2006	University of Pittsburgh	<i>Departmental Colloquium</i>
Jan 2006	Queen's University	<i>Departmental Colloquium</i>
Dec 2005	University of Delaware	<i>Departmental Colloquium</i>
Nov 2005	Johns Hopkins University	<i>Cognitive Psychology</i>
Feb 2005	UMass Boston	<i>Cognitive Psychology</i>
Feb 2005	Harvard University	<i>Cognition, Brain, & Behavior</i>
Feb 2005	University of Victoria	<i>Cognitive Psychology</i>
Oct 2004	University of British Columbia	<i>Visual Attention & Cognition Groups</i>
May 2004	Massachusetts General Hospital	<i>Martinos Biomedical Imaging Center</i>
May 2004	M.I.T.	<i>Brain & Cognitive Sciences</i>
Jan 2003	Vrije University, Amsterdam	<i>Dept. of Psychology Cognitive Group</i>
Nov 2003	Harvard University	<i>Laboratory for Developmental Studies</i>
Mar 2001	Harvard University	<i>Cognition, Brain, & Behavior</i>

Editorial Boards

Perception & Psychophysics
Psychonomic Bulletin & Review
Visual Cognition

Ad-Hoc Reviewer

Attention, Perception & Psychophysics
Cognition
Cognitive, Affective, and Behavioral Neuroscience
Cognitive Development
Cognitive Science
Human Communication Research
Experimental Psychology
Journal of Experimental Psychology: Human Perception & Performance
Journal of Experimental Psychology: Learning, Memory, & Cognition
Journal of Vision
NeuroImage
Neuropsychologia
Perception
Perception & Psychophysics
Philosophical Psychology
PLOS One
Psychological Research
Psychological Science
Psychonomic Bulletin & Review
Quarterly Journal of Experimental Psychology
Transactions on Applied Perception
Visual Cognition

Grant Reviewing

NSF Information & Intelligent Systems (IIS)
NSF Perception, Action, & Cognition
NSF Time-sharing Experiments for the Social Sciences

Teaching

Fall 2009 -	Visual Space & Structure (Graduate)
Spring 2009 -	Freshman Seminar: Visual Perception & Aesthetics
Winter 2008-	Practical Experiment Building with Matlab (Graduate)
Fall 2008-	Cognitive Science Honors Thesis Seminar
Fall 2007-	Cognitive Psychology
Fall 2006-	Visual Attention & Memory (Graduate)
Fall 2006-	High Level Vision
Fall 2003	Teaching Fellow, Experimental Neuroscience of Motion
Spring 2002	Head Teaching Fellow, Vision & the Brain
Sept 2001	Harvard Bok Center for Teaching & Learning Seminar on "Teaching Science to Non-Scientists"
Spring 2001	Teaching Fellow, Vision & the Brain
Fall 2000	Teaching Fellow, Cognitive Psychology
2001-Present	Advisor to dozens of undergraduate & thesis students

Professional Service

2009 -	<i>Science Chicago</i> educational outreach
2009-	Northwestern Sigma Xi public outreach talks, to adults & students
2008-	Director of Undergraduate Studies, Northwestern Cognitive Science
2007-	Committee on Undergraduate Studies, Northwestern Psychology
2007-	Honors Committee, Northwestern Psychology
2007-	Cognitive Science Program Committee, Northwestern University
2007-2009	Advisor to 2 <i>Illinois Math & Science Academy</i> students per year.
2006-2008	Organizer, OPAM conference on Object Perception Attention & Memory
2006-	Computing Committee, Northwestern Psychology
2006-	Center for Technology & Social Behavior, Northwestern University
2003-2004	Organizer of Harvard Cognition, Brain, & Behavior Colloquia
2001-2004	Resident Tutor in Psychology, Pforzheimer House, Harvard
2000-2001	Graduate Resident Advisor, Perkins Hall, Harvard
1997-1999	Founder & President, Rutgers Undergraduate Cognitive Science Society
1996-1998	Editor of internet edition of Rutgers student newspaper, <i>The Daily Targum</i>

Ph.D. Thesis Committees

2006-2007	Ann Ming Liu
2007-2008	KatieAnn Skogsberg
2008-2009	Parkson Leung, John Meixner
2009-2010	Genna Bebko, Luci Iordanescu, Heather Lucas, Heather Norbury, Mike Winograd, Ezra Wegbreit
2010-2011	Heeyoung Choo, Tim Sweeny

Graduate Diversity Recruiting

Oct 2008 Duke University

April 2008 University of Illinois, Urbana-Champaign

March 2008 Northeastern Illinois University