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Postdoctoral fellow, Howard Hughes Medical Institute, Department of Physiology and Biophysics, University of Washington; Helen Hay Whitney Foundation Fellow

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Date of birth: 21 September 1971
Place of birth: Tehran, Iran
Nationality: Canada
Marital status: Married, two children (born 2003 and 2005)

Education

B. Sc., 1994 Department of Electrical Engineering, Sharif University of Technology
M. Sc., 2001 Department of Physiology, University of Toronto
Ph. D., 2007 Center for Neural Science, New York University
Dissertation: *Neural Representation of Sensory Information in Perception*

Honors and Awards

1989 National Physics Olympiad Award, Ministry of Education, Iran
1999-2001 NSERC Scholarship Univ. of Toronto, Canada
2001-2002 McCracken Fellowship New York Univ., USA
2002-2006 Goldsmith Research Fellowship New York Univ., USA
2006 Travel Grant, New York Univ., USA
2006 Travel Fellowship, European Conference on Visual Perception (ECVP)
2007 Dean's Outstanding Dissertation Award, New York Univ., USA
2007-present Helen Hay Whitney Foundation Fellowship

Research Experience

1999-2001 Neural correlates of slow hippocampal oscillations, with Frances Skinner
2001-2002 Dynamics of surround modulation in V1, with Robert M. Shapley

- 2002-2003 Topography of response fields in area LIP, with Paul W. Glimcher
- 2003-2006 Neural representation of sensory information in perception, with J. Anthony Movshon
- 01/07-03/07 Neural correlates of perceptual decisions in humans, with David J. Heeger
- 04/07-present Neural integration of temporal cues that guide time-sensitive actions, with Michael N. Shadlen

Learned Societies

- 2001-present Society of Neuroscience
- 2003-2005 Graduate Forum, New York University
- 2005-present Vision Sciences Society
- 2005-present American Association for the Advancement of Science

Tutorials and Workshops

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| 1999 | Neural Computation Tutorial | Gatsby Unit, Univ. College London |
| 2002 | Neural Dynamics Workshop | M.B.I., Ohio State Univ. |
| 2004 | Neurobiology of decision-making | CoSyNe, Cold Spring Harbor |
| 2005 | Neural correlations, information coding | CoSyNe, Salt Lake City |
| 2007 | Neurally plausible statistical inference | CoSyNe, Salt Lake City |

Publications

- Jazayeri, M (2008). Probabilistic sensory recoding. *Curr Opin Neurobiol* (submitted).
- Dinstein, I., Gardner, J.L., Jazayeri, M. and Heeger, D.J. (2007). Distributed representations of executed and observed movements in human aIPS. *J Neurosci.* (revision)
- Jazayeri, M. and Movshon, J.A. Integration of sensory evidence in motion discrimination. *Journal of Vision* 7(12):7, 1-7.
- Jazayeri, M. and Movshon, J.A. (2007) A novel perceptual illusion reveals mechanisms of sensory decoding. *Nature* 446:912-15.
- Jazayeri, M. and Movshon, J.A. (2006). Optimal representation of sensory information by neural populations. *Nat Neurosci.* 9(5):690-6.
- Jazayeri, M. and Skinner, F.K. (2003). Multimodality in a dynamic feedback network with stochastic input. *Neurocomputing* 52-54:805-811.
- Jazayeri, M., Zhang, L. and Skinner, F.K. (2001) A dynamical feedback mechanism for the generation of hippocampal field rhythms, *Neurocomputing* 38-40:683-689.

Abstracts

- Dinstein, I., Gardner, J.L., Jazayeri, M. and Heeger, D.J. (2007). Using classification to decode executed movements from fMRI response patterns. *Society for Neuroscience*.
- Graf, A., Kohn, A., Jazayeri, M. and Movshon A.J. (2007). Decoding responses from populations of neurons in macaque primary visual cortex. *Neural Coding, Computation and Dynamics (NCCD)*.
- Jazayeri, M. and Movshon, A.J. (2007). Integration of sensory responses in coarse and fine motion discriminations. *Visual Science Society*.
- Jazayeri, M., Gardner, J.L. and Heeger, D.J. (2007) Hemodynamic correlates of a perceptual decision. *Computational System Neuroscience*.
- Graf, A., Kohn, A., Jazayeri, M. and Movshon A.J. (2007). Decoding neural responses in macaque primary visual cortex. *Computational System Neuroscience*.
- Jazayeri, M. and Movshon, A.J. (2006). Discrimination induced misperception of motion. *European Conference on Visual Perception*.
- Jazayeri, M. and Movshon, A.J. (2005). Computing sensory likelihoods with neurons. *Society for Neuroscience*.
- Jazayeri, M. and Movshon, A.J. (2005) Visual motion processing in a direction discrimination task. *Visual Science Society*.
- Jazayeri, M. and Movshon, A.J. (2005) Visual motion processing in a direction discrimination task. *Computational System Neuroscience*.
- Jazayeri, M. and Hawken, M.J. and Shapley, R.M. (2002). Dynamic modulatory effects of surround orientation on single-cell response in macaque V1. *Society for Neuroscience*.
- Jazayeri, M. and Skinner F.K. (2002). Multimodality in a dynamic feedback network with stochastic input. *Computational Neuroscience Meeting*.
- Jazayeri, M. and Skinner F.K. (2000). Generation of spontaneous slow rhythms in hippocampus CA1. *Frontiers in Physiology, University of Toronto, Canada*.
- Jazayeri, M., Zhang, L. and Skinner F.K. (2000). Control of network frequency by the number of synaptic inputs. *Computational Neuroscience Meeting*.

Teaching Experience/Assistance

2006	Mathematical Tools for Neural Science	New York University
2003	Rep. and Anal. of Visual Images	New York University
2002	Behavioral and Integrative Neuroscience	New York University
2001	Circuits and Systems	University of Toronto
2000	Electricity and Magnetism	University of Toronto
2000	Electricity and Magnetism Lab.	University of Toronto

1999 Calculus

University of Toronto

Invited Presentations

2004 Graduate School of Arts and Sciences Dean's Day, New York University

2006 Department of Psychology, New York University

2006 Department of Physiology and Biophysics, University of Washington

2007 Computational System Neuroscience workshop on 'Neurally plausible statistical inference'

Manuscript Review

Science, Journal of Neurophysiology, Journal of Vision, Perception