

Samuel A. Nastase
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Hanover, NH 03755
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Education

PhD—Cognitive Neuroscience
Dartmouth College, Hanover, NH Expected August, 2017
Advisor: James V. Haxby

MSc—Cognitive Neuroscience July, 2012
University of Trento, Trento, Italy
Advisor: Uri Hasson

BA—Cognitive Science, Philosophy May, 2010
Johns Hopkins University, Baltimore, MD
Advisor: Michael McCloskey

Employment

Student Intern—Medical Imaging Technologies June–August, 2016
Siemens Healthcare, Princeton, NJ
Advisor: Francisco Pereira

Publications

Nastase, S. A., Davis, B., Halchenko, Y. O., Hasson, U. (2016). *Cross-modal searchlight classification: methodological challenges and recommended solutions*. Paper presented at the 2016 IEEE International Workshop on Pattern Recognition in Neuroimaging (PRNI).

Connolly, A. C., Sha, L., Guntupalli, J. S., Oosterhof, N. N., Halchenko, Y. O., **Nastase, S. A.**, Visconti di Oleggio Castello, M., Abdi, H., Jobst, B. C., Gobbini, M. I., & Haxby, J. V. (in press). How the human brain represents perceived dangerousness or “predacity” of animals. *Journal of Neuroscience*.

Nastase, S. A., Iacovella, V., Davis, B., & Hasson, U. (2015). Connectivity in the human brain dissociates entropy and complexity of auditory inputs. *NeuroImage*, 108, 292-300.

Nastase, S. A., Iacovella, V., & Hasson, U. (2014). Uncertainty in visual and auditory series is coded by modality-general and modality-specific neural systems. *Human Brain Mapping*, 35(4), 1111-1128.

Manuscripts in preparation

Nastase, S. A., Connolly, A. C., Oosterhof, N. N., Halchenko, Y. O., Guntupalli, J. S., Visconti di Oleggio Castello, M., Gors, J., Gobbini, M. I., Haxby, J. V. (2016). Attention selectively reshapes the geometry of distributed semantic representation. *bioRxiv preprint*. Manuscript submitted for publication.

Nastase, S. A., & Haxby, J. V. (2016). Structural basis of semantic memory. In J. H. Byrne (Ed.), *Learning and Memory: A Comprehensive Reference*. Cambridge, MA: Academic Press.

Presentations and posters

- Nastase, S. A.** & Haxby, J. V. (2016, November). *Constructing a representational atlas for human cerebral cortex*. Invited keynote talk at the Neurocog 2016 workshop at Katholieke Universiteit Leuven, Leuven, Belgium.
- Nastase, S. A.**, Guntupalli, J. S., Haxby, J. V., Halchenko, Y. O. (2016, November). *Localizing functional regions of interest based on responses to dynamic naturalistic stimuli*. Poster presented at the annual meeting of the Society for Neuroscience, New York, NY.
- Nastase, S. A.**, Green, A. E., Cross, E. S., Lee, Y.-S., Halchenko, Y. O., Haxby, J. V., Kraemer, D. J. M. (2016, April). *Decoding contributions of prefrontal and sensory-specific cortices to the retrieval of perceptual knowledge*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, New York, NY.
- Nastase, S. A.**, Visconti di Oleggio Castello, M., Halchenko, Y. O., Connolly, A. C., Oosterhof, N. N., Gobbini, M. I., & Haxby, J. V. (2015, October). *Attention alters animal and action representation in highly-distributed, functionally-defined cortical parcels*. Poster presented at the annual meeting of the Society for Neuroscience, Chicago, IL.
- Visconti di Oleggio Castello, M., **Nastase, S. A.**, Gobbini, M. I., Haxby, J. V., & Halchenko, Y. O. (2015, October). *Finding cortical patches of shared representations: A comparison of clustering algorithms on representational geometries, and the effect of cross-validation to reduce physiological noise*. Poster presented at the annual meeting of the Society for Neuroscience, Chicago, IL.
- Nastase, S. A.**, Connolly, A. C., Oosterhof, N. N., Halchenko, Y. O., Visconti di Oleggio Castello, M., Gors, J., Gobbini, M. I., & Haxby, J. V. (2015, October). *Attention selectively reshapes the geometry of distributed semantic representation*. Oral presentation at the annual retreat of the Center for Cognitive Neuroscience, Dartmouth College, Hanover, NH.
- Nastase, S. A.**, Visconti di Oleggio Castello, M., Haxby, J. V., Gobbini, M. I., & Halchenko, Y. O. (2015, June). *Clustering cortical searchlights based on shared representational geometry*. Oral presentation at the annual meeting of the Organization for Human Brain Mapping, Honolulu, HI.
- Nastase, S. A.** (2015, June). *Multivariate pattern analysis for neuroscience*. Invited lecture at the Dartmouth-Hitchcock Medical Center, Lebanon, NH.
- Nastase, S. A.**, Connolly, A. C., Oosterhof, N. N., Halchenko, Y. O., Gors, J., Gobbini, M. I., & Haxby, J. V. (2014, August). *Attention reshapes distributed population codes for animal and action representation*. Poster presented at the Center for Cognitive Neuroscience Workshop on Decoding Population Responses, Dartmouth College, Hanover, NH.
- Nastase, S. A.**, Connolly, A. C., Oosterhof, N. N., Halchenko, Y. O., Gors, J., Gobbini, M. I., & Haxby, J. V. (2014, June). *Attention locally modulates the discriminability of high-level, task-relevant representations*. Poster presented at the annual meeting of the Organization for Human Brain Mapping, Hamburg, Germany.

Nastase, S. A., Connolly, A. C., Oosterhof, N. N., Halchenko, Y. O., Gors, J., Gobbini, M. I., & Haxby, J. V. (2014, May). *Attentional allocation locally warps representational space*. Poster presented at the annual meeting of the Vision Sciences Society, St. Pete Beach, FL.

Nastase, S. A. (2014, April). *Design considerations for fMRI studies using multivariate pattern analysis*. Oral presentation at the fMRI Brown Bag symposium series at Dartmouth College, Hanover, NH.

Nastase, S. A. (2014, April). *Task-dependent warping in high-dimensional neural representational space*. Oral presentation at the Social Brain Sciences symposium series, Dartmouth College, Hanover, NH.

Nastase, S. A., Iacovella, V., & Hasson, U. (2012, April). *Statistical constraints in the auditory domain impact whole-brain connectivity patterns of the anterior cingulate and hippocampus*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, Chicago, IL.

Nastase, S. A., Iacovella, V., & Hasson, U. (2012, February). *Do structured inputs result in structured activity? The impact of temporal structure in the auditory domain on functional connectivity patterns*. Poster presented at the first international workshop on Segregation and Integration in Music and Language, Tübingen, Germany.

Nastase, S. A., Iacovella, V., & Hasson, U. (2011, April). *Modality-general and modality-specific systems coding for input order*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.

Nastase, S. A., Iacovella, V., & Hasson, U. (2010, November). *Does the coding of order depend on language systems?* Poster presented at the annual Neurobiology of Language Conference, San Diego, CA.

Teaching experience

Teaching assistant – Systems Neuroscience with Lab Fall, 2015
Dartmouth College
Instructors: Jeffrey Taube, Matthijs van der Meer

Teaching assistant – Brain Mapping with fMRI Winter, 2015
Dartmouth College
Instructor: Won Mok Shim

Teaching assistant – Lab in Psychological Science Spring, 2014
Dartmouth College
Instructor: Jonathan Freeman

Teaching assistant – Introduction to Neuroscience Fall, 2013
Dartmouth College
Instructor: Catherine Cramer
Guest lectures: Vision, Attention

Teaching fellow – Art, Mind & Brain Harvard University Instructors: David Melcher, Francesca Bacci	Summer, 2013
Teaching fellow – Windows into the Structure of Mind & Brain Harvard University Instructors: Alfonso Caramazza, John Assad	Summer, 2011–2012
Teaching fellow – Cutting Edge Neuroscience in Film & Television Harvard University Instructor: George Alvarez	Summer, 2012
Teaching fellow – Hormones, Brain & Behavior Harvard University Instructor: Marc Tetel	Summer, 2011
Honors and awards	
Merit Abstract Award Organization for Human Brain Mapping, Chicago, USA	May, 2015
Neukom Travel Grant The William H. Neukom Institute for Computational Science	May, 2015
Marie A. Center 1982 Graduate Award for Excellence in Teaching Department of Psychological & Brain Sciences, Dartmouth College	June, 2014
Conference Travel Grant Graduate Student Council, Dartmouth College	April, 2014
Graduate Travel Award Dartmouth Graduate Studies, Dartmouth College	April, 2014
Trainee Abstract Travel Award Organization for Human Brain Mapping, Hamburg, Germany	March, 2014
Merit Award 2012 Psychology & Cognitive Sciences Department, University of Trento	December, 2012
Honors Psychology & Cognitive Sciences Department, University of Trento	July, 2012
Departmental Honors Cognitive Science Department, Johns Hopkins University	May, 2010
General Honors Krieger School of Arts & Sciences, Johns Hopkins University	May, 2010

Dean's List

2006–2010

Krieger School of Arts & Sciences, Johns Hopkins University

Professional activities

Volunteer reviewer:

Social Cognitive and Affective Neuroscience	May, 2016–present
Journal of the International Neuropsychological Society	April, 2016–present
Frontiers in Neuroscience	March, 2016–present
NeuroImage	March, 2014–present

Society memberships:

Society for Neuroscience	2015–present
Organization for Human Brain Mapping	2014–present
Vision Sciences Society	2014–present
Cognitive Neuroscience Society	2011–present

Leadership and involvement

ReproNim: Center for Reproducible Neuroimaging Computation	November, 2016–present
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Contributor<http://reproducibleimaging.org>

DataLad: Git-based data-sharing interface	November, 2016–present
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Contributor and exhibitor<http://datalad.org>

Center for Cognitive Neuroscience Workshop on Predictive Coding	August, 2016
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Organizing committee member

Dartmouth College

Center for Open Neuroscience	Fall, 2015–present
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Contributor<http://centerforopenneuroscience.org>

NeuroDebian	November, 2014–present
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Contributor and exhibitor<http://neuro.debian.net>

AFNI Boot Camp at Dartmouth	Fall, 2014
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Primary organizer

Dartmouth College

Professional Ethics Program	Fall, 2014
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Ethics trainer

Dartmouth College

GWISE Science Day for local middle schools	April, 2014
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Station leader

Dartmouth College

Cognitive Brown Bag symposium series

Primary organizer

Dartmouth College

September, 2014–present

fMRI Brown Bag symposium series

Primary organizer

Dartmouth College

September, 2013–present

Departmental Social

Primary organizer

Dartmouth College

September, 2013–present

Harvard Summer Program in Trento, Italy

Resident advisor

Harvard University

Summer, 2013

Johns Hopkins Residential Life

Resident advisor

Johns Hopkins University

2008–2010