

# Andrew Jaegle

drewjaegle.com  
ajaegle@upenn.edu | +1 937-344-2858

## Computational Neuroscience / Computer Vision

### EDUCATION

#### UNIVERSITY OF PENNSYLVANIA | PHD IN NEUROSCIENCE

2012 → present | Philadelphia, PA

Advisors: Kostas Daniilidis (Computer Vision), Diego Contreras (Systems Neuroscience)

#### TEXAS A&M UNIVERSITY | BA IN PHILOSOPHY, MUSIC THEORY/COMPOSITION, MATHEMATICS

May 2007 | College Station, TX

GPA: 4.0 / 4.0 • summa cum laude with University and Foundation Honors • Dean's Honor Roll (All Semesters)

### RESEARCH EXPERIENCE

2013-present	Penn GRASP Lab	Advisor: Kostas Daniilidis
2013-present	Penn Department of Neuroscience	Advisor: Diego Contreras
2015-present	Max Planck Institute for Intelligent Systems	Advisor: Michael J. Black
Spring 2013	Penn Department of Neuroscience	Advisor: Maria Geffen
2010-2012	CUNY Graduate Center/CCNY Cognitive Neuroscience	Advisor: Tony Ro

### JOURNAL/CONFERENCE PUBLICATIONS

1. Jaegle\*, A., Phillips\*, S., Ippolito, D., and Daniilidis, K. (2016b). Unsupervised learning of image motion by recomposing sequences. arXiv
2. Jaegle\*, A., Phillips\*, S., and Daniilidis, K. (2016a). Fast, Robust, Continuous Monocular Egomotion Computation. International Conference on Robotics and Automation (ICRA)
3. Carruthers, I. M., Laplagne, D. A., Jaegle, A., Briguglio, J. J., Mwilambwe-Tshilobo, L., Natan, R. G., and Geffen, M. N. (2015). Emergence of invariant representation of vocalizations in the auditory cortex. *Journal of Neurophysiology*, 114(5):2726–2740
4. Sedigh-Sarvestani, M., Fernandez-Lamo, I., Jaegle, A., and Taylor, M. M. (2014). Second Order Receptive Field Properties of Simple and Complex Cells Support a New Standard Model of Thalamocortical Circuitry in V1. *The Journal of Neuroscience*, 34(34):11177–11179
5. Jaegle, A. and Ro, T. (2013). Direct Control of Visual Perception with Phase-specific Modulation of Posterior Parietal Cortex. *Journal of Cognitive Neuroscience*, 26(2):422–432

\*joint first authors

### POSTERS, ABSTRACTS, AND INVITED TALKS

1. Jaegle, A. (2016). Representing human body shape in brains, models, and deep neural networks. Talk given at Body Labs, New York, NY
2. Jaegle, A., Black, M. J., and Romero, J. (2016a). Learning to predict body shapes from images. CIFAR Deep Learning Summer School, Montreal, QC
3. Jaegle, A., Black, M. J., and Romero, J. (2016b). Learning to predict body shapes from images. Mid-Atlantic Computer Vision Workshop, Baltimore, MD
4. Jaegle, A., Romero, J., and Black, M. J. (2015). Filter characteristics of a deep neural network for shape localization. BCCN Computational Vision Summer School, Freudenstadt, Germany
5. Carruthers, I. M., Natan, R. G., Jaegle, A., Mwilambwe-Tshilobo, L., Laplagne, D. A., and Geffen, M. N. (2014). Changes in encoding of communication signals by populations of neurons in the auditory cortex. In Computational and Systems Neuroscience (COSYNE) Meeting, Salt Lake City, UT

6. Carruthers, I. M., Natan, R. G., Jaegle, A., Mwilambwe-Tshilobo, L., Laplagne, D. A., and Geffen, M. N. (2013). Noise correlations and invariance to basic acoustic transformations of vocalizations in the auditory cortex. In Society for Neuroscience Annual Meeting, San Diego, CA
7. Jaegle, A. and Ro, T. (2012). Direct Control of Conscious Visual Perception with Phase-specific Modulation of Occipito-Parietal Cortex. In Society for Neuroscience Annual Meeting, New Orleans, LA

## AWARDS AND HONORS

2014-2016	NSF IGERT Complex Scene Perception Fellowship
2014	Hearst Foundation Fellowship
2012-2013	Penn NIH Systems and Integrative Biology Training Grant
2010-2012	CUNY Graduate Center Enhanced Chancellor's Fellowship
2007	Phi Beta Kappa
2004-2007	Texas A&M Honors - University Scholarship
2003-2007	Aventis Pharmaceuticals Scholarship
2003-2007	Texas Scottish Rite Hospital for Children Legacy Scholarship
2003-2007	Texas A&M President's Endowed Scholarship (full scholarship)
2003	National Merit Scholarship
2003	Valedictorian, Internationale Schule Frankfurt Rhein-Main

## TEACHING EXPERIENCE

Spring 2016	Penn	TA, Theoretical Neuroscience (Graduate)
Fall 2014	Penn	TA, Introduction to Brain and Behavior (Undergraduate)
Spring 2012	CUNY	TA, Brain, Mind, & Behavior (Undergraduate)
Fall 2011	CUNY	TA, Cognitive Psychology (Undergraduate)
2005-2006	Texas A&M	Substitute lecturer, Music Theory and Analysis I & II (Undergraduate)
Spring 2003	Texas A&M	Grader, Calculus I and III (Undergraduate)

## SERVICE

2014-present	Penn	Student Leadership, Computational Neuroscience Initiative
2014-2016	Penn	Chair, Neuroscience student-invited colloquium committee
2012-2013	Penn	Member, Neuroscience student-invited colloquium committee
2011-2012	CUNY	Chair, Cognitive Neuroscience colloquium committee
2011-2012	CUNY	Student member, Cognitive Neuroscience PhD admissions committee
2006	Texas A&M	Student reviewer, University Scholar acceptance committee

## SELECTED TECHNICAL SKILLS

Mac OS X • Ubuntu  
 MATLAB (proficient) • Python (proficient) • Lua (proficient) • C/C++ (prior experience)  
 Torch • Caffe  
 Bash shell •  $\text{\LaTeX}$   
 Microsoft Office • Adobe Illustrator • Gimp

## LANGUAGES

Native fluency:

English

Written/spoken proficiency:

German • French