

Jenelle Feather
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Education

Massachusetts Institute of Technology	Sept 2016-Present
PhD Candidate in Brain and Cognitive Science	
Massachusetts Institute of Technology	Sept 2009-June 2013
Bachelors of Science in Physics	
Bachelors of Science in Brain and Cognitive Sciences	

Research Groups

Laboratory for Computational Audition, MIT	Sept 2016-Present
PhD Candidate	
Google	June 2019-Sept 2019
Research Intern, Machine Perception	
Lawrence Livermore National Lab	June 2018-Aug 2018
CSGF Summer Practicum, Center for Applied Scientific Computing	
UC Berkeley & UCSF Graduate Program in BioEngineering	Sept 2015-Aug 2016
PhD Student (Transferred)	
Kanwisher Lab, MIT	June 2013-Aug 2015
Research Assistant	
MITRE Corporation	May 2012-Sept 2012
Summer Intern, ISR Division	
Moore Lab, MIT	Jan 2010-Aug 2011
Undergraduate Research Assistant	

Teaching Experience

MIT Brain And Cognitive Sciences	Teaching Assistant	Feb 2017-May 2017
Introduction to Neural Computation		
MGH/HST Martinos Center	Technical Assistant	Sept 2013, April 2014, Sept 2014
Functional MRI Visiting Fellowship, Multimodality Short Course		
MIT's Concourse Program	Teaching Assistant	Sept 2011-May 2013
Introduction to Classical Mechanics, Introduction to Electricity and Magnetism		

Professional Activities

Cosyne Workshop Organizer: Scrutinizing Models of Brain Function	2020
MIT BCS Postbaccalaureate Program, Mentor	2018-Present
MIT Undergraduate Research Opportunities Program, Mentor	2018-2019
MIT Computational Tutorials, Seminar Organizer	2016-Present
Openmind Computing Cluster, Group Representative	2016-Present
Center for Brain Minds and Machines Summer Research Program, Mentor	2017, 2020

Awards

Friends of McGovern Institute Graduate Fellowship	2020
Speed Up Green Up AI Hackathon: Most heroic achievement	2020
Travel award for NeurIPS	2019
MIT IBM Quest: Best Poster Award	2019
Travel award for ARO Annual MidWinter Meeting	2019
Travel award for Conference on Cognitive Computational Neuroscience	2018
Department of Energy Computation Science Graduate Fellowship	2016
National Science Foundation Graduate Fellowship (declined)	2016
Hans-Lukas Teuber Award for Outstanding Academics in BCS at MIT	2013

Journal Publications

Intracranial recordings from human auditory cortex reveal a neural population selective for musical song. Norman-Haignere, S., **Feather, J.**, Brunner, P., Ritaccio, S., McDermott, J., Schalk, G., and Kanwisher, K. *BioRxiv*. (2019).

Representational similarity precedes category selectivity in the developing ventral visual pathway. Cohen, M., Dilks, D., Koldewyn, K., Weigelt, S., **Feather J.**, Kell, A., Keil, B., Fischl, B., and Zöllei, L., Wald, L. Saxe, R., Kanwisher K. *Neuroimage*. (2019).

Connectivity precedes function in the development of the visual word form area. Saygin, Z., Osher, D., Norton, E., Youssoufian, D., Beach, S., **Feather J.**, Gaab, N., Gabrieli, J., & Kanwisher, K. *Nature Neuroscience*. (2016).

Open Science Collaboration. Estimating the reproducibility of psychological science. *Science*. (2015).

Open Science Collaboration. An Open, Large-Scale, Collaborative Effort to Estimate the Reproducibility of Psychological Science. *Perspectives on Psychological Science*. (2012).

Conference Papers

Metamers of neural networks reveal divergence from human perceptual systems. **Feather J.**, Durango A. Gonzalez R., & McDermott, J. *Advances in Neural Information Processing Systems*. (2019).

Untangling in Invariant Speech Recognition. Stephenson C., **Feather J.**, Padhy S. Elibol O., Tang H., McDermott J., Chung S. *Advances in Neural Information Processing Systems*. (2019).

Auditory texture synthesis from task-optimized convolutional neural networks. **Feather J.** & McDermott, J. *Conference on Cognitive Computational Neuroscience*. (2018) (Podium Presentation).

Conference Abstracts

Model metamers reveal that deep neural network invariances differ from human perceptual invariances. **Feather J.** Durango, A., Gonzalez, R., & McDermott, J. *Computational and Systems Neuroscience (Cosyne)*. (2020).

Auditory Texture Models Derived from Task-Optimized Deep Neural Network Representations. **Feather J.** & McDermott, J. *Association For Research In Otolaryngology (ARO) Annual Mid-Winter Meeting*. (2019) (Podium Presentation).

Auditory texture synthesis from task-optimized convolutional neural networks. **Feather J.** & McDermott, J. *Society for Neuroscience* (2018).

Neural Selectivity for Music, Speech, and Song in Human Auditory Cortex. Norman-Haignere, S., **Feather J.**, Brunner, P., Ritaccio, A., McDermott, J., Kanwisher, N., & Schalk, G. *Society for Neuroscience* (2018).

Model sonification reveals advantages of task-optimized sensory models. **Feather J.** & McDermott, J. *Computational and Systems Neuroscience (Cosyne)*. (2018).

Sonification of auditory models via synthesis of statistically matched stimuli. **Feather J.** & McDermott, J. *International Conference on Auditory Cortex*. (2017).

- High-resolution intracranial recordings provide direct electrophysiological evidence for music and speech-selective neural populations in human auditory cortex. **Feather J.**, Norman-Haignere, S., Brunner, P., Ritaccio, A., McDermott, J., Kanwisher, N., & Schalk, G. *American Academy of Neurology* (2017).
- High-resolution intracranial recordings provide direct electrophysiological evidence for music and speech-selective neural populations in human auditory cortex. Norman-Haignere, S., **Feather J.**, Brunner, P., Ritaccio, A., McDermott, J., Kanwisher, N., & Schalk, G. *Society for Neuroscience* (2016).
- Tikhonov regularized regression for voxel-wise modeling of fMRI responses to natural stories. **Feather J.**, Huth, A., Nunez-Elizalde, A., & Gallant, J. *Organization for Human Brain Mapping*. (2016).
- Tikhonov regularized regression for voxel-wise modeling of fMRI responses to natural stories. **Feather J.**, Huth, A., Nunez-Elizalde, A., & Gallant, J. *Pattern Recognition for Neural Imaging*. (2016).
- Common representational structures across the ventral visual pathway of children and adults. Cohen, M., Dilks, D., **Feather J.**, Koldewyn, K., Weight, S., & Kanwisher, N. *Journal of Vision*. (2016).
- Saygin, Z., Scott, T., **Feather J.**, Fedorenko, E., & Kanwisher, N. The VWFA and FFA have sharply contrasting functional selectivities and patterns of connectivity. *Journal of Vision* 15.12 (2015): 914-914.
- Lafer-Sousa R., Conway, B., Kell, A., **Feather J.**, Takahashi, A., Kanwisher N. Similar organization of the ventral visual pathway in humans and macaque monkeys: Color regions sandwiched between face and scene regions. *Soc. Neurosci. Abstr.* (2014).
- Lafer-Sousa R., Kell, A., Takahashi, A., **Feather J.**, Conway, B., Kanwisher N. Parallel processing of colors and faces in human ventral visual stream: functional evidence and technical challenges. *Journal of Vision Abstr.* (2014).