



## Srikanth Ryali

Sr Res Scientist-Basic Life, Psych/Major Laboratories and Clinical & Translational Neurosciences Incubator

 NIH Biosketch available Online

### Bio

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#### EDUCATION AND CERTIFICATIONS

- PhD, Indian Institute of Science , Electrical Engineering (2005)
- M S, Indian Institute of Science , Electrical Engineering (1998)
- BS, Osmania University , Electrical Engineering (1996)

#### LINKS

- SCSNL: [http://stanford.edu/group/scsnl/cgi-bin/drupal\\_scsnl/](http://stanford.edu/group/scsnl/cgi-bin/drupal_scsnl/)

### Publications

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#### PUBLICATIONS

- **Robust, Generalizable, and Interpretable Artificial Intelligence-Derived Brain Fingerprints of Autism and Social Communication Symptom Severity.** *Biological psychiatry*  
Supekar, K., Ryali, S., Yuan, R., Kumar, D., de Los Angeles, C., Menon, V.  
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- **Intrinsic functional architecture of the human speech processing network.** *Cortex; a journal devoted to the study of the nervous system and behavior*  
Abrams, D. A., Kochalka, J. n., Bhide, S. n., Ryali, S. n., Menon, V. n.  
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  - **Multivariate dynamical systems-based estimation of causal brain interactions in fMRI: Group-level validation using benchmark data, neurophysiological models and human connectome project data** *JOURNAL OF NEUROSCIENCE METHODS*  
Ryali, S., Chen, T., Supekar, K., Tu, T., Kochalka, J., Cai, W., Menon, V.  
2016; 268: 142-153
  - **Distinct Global Brain Dynamics and Spatiotemporal Organization of the Salience Network** *PLOS BIOLOGY*  
Chen, T., Cai, W., Ryali, S., Supekar, K., Menon, V.  
2016; 14 (6)
  - **Neural circuits underlying mother's voice perception predict social communication abilities in children** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Abrams, D. A., Chen, T., Odriozola, P., Cheng, K. M., Baker, A. E., Padmanabhan, A., Ryali, S., Kochalka, J., Feinstein, C., Menon, V.  
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- **A parcellation scheme based on von Mises-Fisher distributions and Markov random fields for segmenting brain regions using resting-state fMRI** *NEUROIMAGE*  
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- **Hippocampal-Prefrontal Engagement and Dynamic Causal Interactions in the Maturation of Children's Fact Retrieval** *JOURNAL OF COGNITIVE NEUROSCIENCE*  
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- **Estimation of functional connectivity in fMRI data using stability selection-based sparse partial correlation with elastic net penalty** *NEUROIMAGE*  
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- **Decoding Subject-Driven Cognitive States with Whole-Brain Connectivity Patterns** *CEREBRAL CORTEX*  
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- **How does a child solve 7+8? Decoding brain activity patterns associated with counting and retrieval strategies** *DEVELOPMENTAL SCIENCE*  
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- **Decoding Temporal Structure in Music and Speech Relies on Shared Brain Resources but Elicits Different Fine-Scale Spatial Patterns** *CEREBRAL CORTEX*  
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- **Sparse logistic regression for whole-brain classification of fMRI data** *NEUROIMAGE*  
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- **Contextual encoding in uniform and adaptive mesh-based lossless compression of MR images** *IEEE TRANSACTIONS ON MEDICAL IMAGING*  
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- **Region of Interest Coding of 2-D and 3-D Magnetic Resonance Images** *ICVGIP*  
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- **Shape Adaptive Integer Wavelet Transform based coding scheme for 2-D/3-D MR Images** *Data Compression Conference, Snowbird, Utah, USA,*  
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- **Modeling and on-line recognition of PD signal buried in excessive noise** *Signal processing*  
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- **MR Image Coding using Content-based Mesh and Context"**, *International Symposium on Signal Processing and Applications*  
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