

Stanford



Srikanth Ryali

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

NIH Biosketch available Online

Bio

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_scsl/

Publications

PUBLICATIONS

- Deep learning models reveal replicable, generalizable, and behaviorally relevant sex differences in human functional brain organization. *Proceedings of the National Academy of Sciences of the United States of America*
Ryali, S., Zhang, Y., de Los Angeles, C., Supekar, K., Menon, V.
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- Robust, Generalizable, and Interpretable Artificial Intelligence-Derived Brain Fingerprints of Autism and Social Communication Symptom Severity. *Biological psychiatry*
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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*
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- **Temporal Dynamics and Developmental Maturation of Salience, Default and Central-Executive Network Interactions Revealed by Variational Bayes Hidden Markov Modeling** *PLOS COMPUTATIONAL BIOLOGY*
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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*
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2016; 268: 142-153
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- **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*
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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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● **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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● **Dynamic Reconfiguration of Structural and Functional Connectivity Across Core Neurocognitive Brain Networks with Development** *JOURNAL OF NEUROSCIENCE*

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● **Multivariate dynamical systems models for estimating causal interactions in fMRI** *NEUROIMAGE*

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● **Discriminatory Learning based Performance Monitoring of Batch Processes** *American Control Conference, USA*

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● **Sparse logistic regression for whole-brain classification of fMRI data** *NEUROIMAGE*

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● **Development, validation, and comparison of ICA-based gradient artifact reduction algorithms for simultaneous EEG-spiral in/out and echo-planar fMRI recordings** *NEUROIMAGE*

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● **Wavelet-based estimation of hemodynamic response function from fMRI data** *INTERNATIONAL JOURNAL OF NEURAL SYSTEMS*

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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*

Srikanth Ryali, A.G. Ramakrishnan
2004

● **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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2004

● **Modeling and on-line recognition of PD signal buried in excessive noise** *Signal processing*

Shetty PK, Srikanth R, Ramu TS
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● **Wavelet-based Coding of 2-D and 3-D coding of MR images** *IEEE-TENCON*

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- **Multivariate searchlight classification of structural MRI in children and adolescents with autism. *Biological Psychiatry***

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