# Srinivas Kota, Ph.D.

## EDUCATION

**Ph.D. in Electrical and Computer Engineering** 2010
Southern Illinois University – Carbondale, IL, USA
Chair: Dr. Lalit Gupta
*Dissertation*: Dimensionality reduction and information fusion strategies for the design of parametric signal classifiers

**M.S. in Electrical and Computer Engineering** 2004
Southern Illinois University – Carbondale, IL, USA
*Project:* A decision fusion strategy for classification of speech produced ear pressure signals

**Diploma in VLSI Design** 2001
Center for Development of Advanced Computing, India

**B. E. in Electronics and Communications Engineering** 2000
Andhra University, India

## RESEARCH AND PROFESSIONAL EXPERIENCE

**Staff Data Scientist** March 2022 – Present
Abbott Diabetes Care, Alameda, CA

**Principal R&D Engineer Consultant** May 2021 – March 2022
Meta Reality Labs, Redmond, WA

**Research Scientist** October 2018 – April 2021
Department of Neurosurgery, UT Southwestern Medical Center, Dallas, TX

**Staff Scientist** I October 2015 - September 2018
Fetal Medicine Institute, Children's National Health System, Washington DC

**Adjunct Assistant Professor** November 2014 – Present
Department of Psychology, University of Nebraska – Lincoln, Lincoln, NE

**Research Scientist** September 2013 – September 2015
Institute for Rehabilitation and Engineering, Madonna Rehabilitation Hospital, Lincoln, NE

**Postdoctoral Research Associate** (PI: Dr. Dennis Molfese) October 2010 – August 2013
Department of Psychology, University of Nebraska – Lincoln

**Graduate Teaching & Research Assistant** (PI: Lalit Gupta) January 2004 – August 2010
Department of Electrical and Computer Engineering, Southern Illinois University - Carbondale

## EXTERNAL FUNDING

- **Funded,** Pediatric EEG System to Support the Development of the Pediatric Intelligently Controlled Assistive Rehabilitation Elliptical. Funding Agency: Goldwin Foundation, Co-Authors: Sue Carraher, Srinivas Kota, Judith M. Burnfield. Award Amount: $35,375.

- **Not Funded**, In-Car Evaluations of Senior Drivers. Preproposal Submitted to AAA Foundation for traffic Safety. Role: Co-Principal Investigator (PI: Anuj Sharma, Iowa State University)

- **Not Funded**, Exploration of the Positive Effects of Natural Environments on Children's Executive Function and Self-Regulation, R21 Submitted to the National Institutes of Child Health and Human Development, Child Development and Behavior Branch, Role: Consultant (PI: Julia Torquati, UNL)

## RESEARCH INTERESTS

- Electrophysiological Techniques to Assess Neural Organization in Stroke and Head Injured Individuals in Response to Therapeutic Rehabilitation Program
- Human-Machine Interactions Using Physiological Signals
- Developing Algorithms to Assess Patient Focused Clinical Assessment
- Development of Computer Based Intervention Strategies for Children with Traumatic Brain Injuries

## AWARDS

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| Abbott Excellence Award (Silver), Abbott Diabetes Care | 2022 |
| Community Service Award, NRIVA Inc. | 2022 |
| The President's Volunteer Service Award (Gold) | 2020 |
| Outstanding Postdoctoral Award, University of Nebraska – Lincoln | 2013 |
| Postdoctoral Travel Grant, University of Nebraska - Lincoln | 2012 |
| Dissertation Research Award, Southern Illinois University - Carbondale | 2009 |
| Travel Grant, Southern Illinois University - Carbondale | 2009 |
| Finalist, Student Paper Competition IEEE Engineering in Medicine and Biology Society | 2008 |
| Graduate Tuition Award, International Programs and Scholars, Southern Illinois University | 2004 |

## TEACHING EXPERIENCE

**Postdoctoral Research Associate** (2010- 2013), University of Nebraska Lincoln

- Trained undergraduate, graduate students, and faculty from various disciplines in the physiological data acquisition, processing, and analysis.

**Teaching Assistant** (2004 -2010), Southern Illinois University Carbondale

- Undergraduate Level Courses – Signals and Systems, Digital Signal Processing
- Graduate Level Courses – Digital Image Processing, Pattern Recognition

## JOURNAL PUBLICATIONS

1. X. Wang, H. Liu, E. B. Ortigoza, **S. Kota,** Y. Liu, R. Zhang, & L. F. Chalak, "Feasibility of EEG Phase-Amplitude Coupling to Stratify Encephalopathy Severity in Neonatal HIE Using Short Time Window", ***Brain Sciences***, *12*(7), 854 (Impact Factor 3.33)
2. X. Wang, H. Liu, **S. Kota,** Y. Das, Y. Liu, R. Zhang, & L. F. Chalak, "EEG Phase-Amplitude Coupling to Stratify Encephalopathy Severity in the Developing Brain", **Computer Methods and Programs in Biomedicine,** Vol. 214, February 2022 (Impact factor 5.428)

3. Y. Das, R. L. Leon, H. Liu, **S. Kota,** Y. Liu, X. Wang, R. Zhang, & L. F. Chalak, "Wavelet-Based Neurovascular Coupling Can Predict Brain Abnormalities in Neonatal Encephalopathy", **Neuroimage: Clinical**, Volume 32, 2021 (Impact factor 4.881)
4. **S. Kota**, K. Jasti, Y. Liu, H. Liu, R. Zhang, & L. F. Chalak, "EEG Spectral Power - A Proposed Physiological Biomarker to Classify the Hypoxic Ischemic Encephalopathy Severity in Real Time," **Pediatric Neurology**, September 2021 (Impact factor 2.890).
5. Y. Das, X. Wang, **S. Kota**, R. Zhang, H. Liu & L. F. Chalak, "Neurovascular Coupling in Newborns Using Processed EEG versus Amplitude-EEG", Scientific Reports, May 2021 (Impact factor 4.525)
6. S. Mulkey, L. Hitchings, R. Persaud, **S. Kota**, G. L. Maxwell, R. Baker, A. du Plessis, & R. B. Govindan, "Cerebral cortical autonomic connectivity in Low-Risk Term Newborns," **Clinical Autonomic Research**, March 2021 (Impact factor 4.432)
7. **S. Kota**, M. D. Rugg, & B. Lega, "Hippocampal Theta Oscillations Distinguish Recollected from Familiar Memory Items in Associative Recognition Memory," **Journal of Neuroscience**, vol 40, Issue 49, pp. 9507-9518, December 2020 (Impact factor 5.673)
8. F. Tian, P. Sepulveda, **S. Kota**, Y. Liu, Y. Das, H. Liu, R. Zhang, & L. F. Chalak, "Regional Heterogeneity of Cerebral Hemodynamics in Mild Neonatal Encephalopathy Measured with Multichannel Near-Infrared Spectroscopy", **Pediatric Research**, 3, pp. 1-9, June 2020 (Impact factor 2.88).
9. Y. Das, H. Liu, F. Tian, **S. Kota**, R. Zhang, & L. F. Chalak, "Rigor of Neurovascular Coupling (NVC) Assessment in Newborns Using Different Amplitude EEG Algorithms," **Scientific Reports**, 10(1), June 2020 (Impact factor 4.525).
10. **S. Kota**, A. Massaro, T. Chang, T. Al-Shargabi, C. Cristante, G. Vezina, A. du Plessis, & R. B. Govindan, "Prognostic Value of Continuous Quantitative Electroencephalogram in Neonates with Hypoxic Ischemic Encephalopathy," **Journal of Child Neurology**, vol 35, Issue 8, April 2020 (Impact factor 1.713).
11. S. Mulkey, **S. Kota**, R. B. Govindan, T. Al-Shargabi, C. B. Swisher, A. Eze, L. Hitchings, S. Russo, N. Herrera, R. McCarter, G. L. Maxwell, R. Baker & A. du Plessis, "The Effect of Labor and Delivery Mode on Electrocortical and Brainstem Autonomic Function during Neonatal Transition," **Scientific Reports**, 9(1), pp. 1-7, Jul 2019 (Impact factor 4.525).
12. D. A. Reich, R. B. Govindan, M. T. Whitehead, J. Wang, T. Chang, **S. Kota**, & A. du Plessis, "The Effect of Unilateral Stroke on Autonomic Function in the Term Newborn," **Pediatric Research**, vol. 85, issue. 6, pp. 830-834, May 2019 (Impact factor 2.88)
13. S. Mulkey, **S. Kota**, C. B. Swisher, L. Hitchings, M. Metzler, Y. Wang, G. Maxwell, R. Baker, A. du Plessis, & R. B. Govindan, "Central Autonomic Nervous System Depression at Term in Neurologically Normal Premature Infants," ***Early Human Development,*** vol. 123, pp. 11-16, August 2018.
14. H. Campbell, R. B. Govindan, **S. Kota**, T. Al-Shargabi, M. Metzler, N. Niforator-Andescavage, T. Chang, A. du Plessis, & A. N. Massaro, "Autonomic Dysfunction in Neonatal Hypoxic Ischemic Encephalopathy Impairs Physiologic Responses to Routine Care Events," ***The Journal of Pediatrics,*** vol. 196, pp. 38-44, May 2018.
15. R. B. Govindan, **S. Kota**, T. Al-Shargabi, C. B. Swisher, & A. du Plessis, "The effect of Respiratory Oscillations in Heart Rate on Detrended Fluctuation Analysis," **The European Physical Journal (EPJ) B**, vol. 90, no. 10, October 2017.
16. **S. Kota**, C. B. Swisher, T. Al-Shargabi, N. Niforatos-Andescavage, A. du Plessis, & R. B. Govindan, "Identification of QRS Complex in Non-Stationary Electrocardiogram in Sick Infants," ***Computers in Biology and Medicine***, vol. 87, pp. 211-216, Aug 2017
17. R. B. Govindan, **S. Kota**, T. Al-Shargabi, A. Massaro, T. Chang, & A. du Plessis, "Effect of Electrocardiogram Interference on Cortico-Cortical Connectivity Analysis and a Possible Solution", ***Journal of Neuroscience Methods***, vol. 270, Sept 2016.
18. D. L. Molfese, A. Ivanenko, A. F. Key, A. Roman, V. J. Molfese, L. M. O'Brien, D. Gozal, **S. Kota**, & C. M. Hudac, "A One-Hour Sleep Restriction Affects Brain Processing in Young Children Across

Tasks: Evidence from Brain Recordings," ***Developmental Neuropsychology***, vol. 39, no. 5, pp. 317-336, July 2013.

19. L. Gupta, **S. Kota**, D. L. Molfese, & R. Vaidyanathan, "Pairwise Diversity Ranking of Polychotomous Features for Ensemble Physiological Signal Classifiers," ***Proceedings of the Institution of Mechanical Engineers, Part H, Journal of Engineering in Medicine***, Vol. 227, no.6, p. 655-662, June 2013.
20. **S. Kota**, K. M. Kelsey, J. B. Rigoni, & D. L. Molfese, "Feasibility of Event-Related Potentials as a Sideline Measure of Neurocognitive Dysfunction During Sporting Events", ***Neuroreport,*** vol. 24, no. 8, pp. 437-439, May 2013.
21. C. M. Hudac, **S. Kota**, J. Nedrow & D. L. Molfese, "Neural Mechanisms Underlying Neuro-Optometric Rehabilitation Following Traumatic Brain Injury," ***Eye and Brain***, January 2012.
22. L. Gupta, S. Kota, P. Yarlagadda, and D. L. Molfese, "Central-Tendency Estimation and Nearest-Estimate Classification of Event Related Potentials," ***Pattern Recognition***, vol. 44, no. 7, pp. 1418-1425, July 2011.
23. L. Gupta, **S. Kota**, S. Murali, & D. L. Molfese, "A Feature Ranking Strategy to Facilitate Multivariate Signal Classification," ***IEEE Transactions on Systems, Man, and Cybernetics C***, vol. 40, no. 1, pp. 98-108, 2010.
24. **S. Kota**, L. Gupta, D. L. Molfese, & R. Vaidyanathan, "A Dynamic Channel Selection Strategy for Dense Array ERP Classification," ***IEEE Transactions on Biomedical Engineering***, vol. 56, no. 4, pp.1040-1051, 2009.
25. H. Kook, L. Gupta, **S. Kota**, D. L. Molfese, & H. Lyytinen, "An Offline/Real-Time Artifact Rejection Strategy to Improve the Classification of Multi-channel Evoked Potentials," ***Pattern Recognition***, vol. 41, no. 6, pp. 1985-1996, 2008.
26. R. Vaidyanthan, M. P. Fargues, R. S. Kurcan, L. Gupta, **S. Kota**, R. D. Quinn, & D. Lin, "A Dual Mode Human-Machine Interface for Robotic Control based on Acoustic Sensitivity of the Aural Cavity," ***International Journal of Robotics Research (IJRR)*** (invited paper), vol. 26, no. 11-12, pp. 1205-1223, 2007.
27. R. Vaidyanathan, B. Chung, L. Gupta, H. Kook, **S. Kota**, & J. West, "A Tongue-Movement Communication and Control Concept for Hands-Free Human-Machine Interfaces," ***IEEE Transactions on Systems, Man, and Cybernetics A***, vol. 37, no. 4, pp. 533-546. 2007.

## BOOK CHAPTER

1. **S. Kota**, L. Gupta, D. L. Molfese, & R. Vaidyanathan, "Diversity-Based Selection of Polychotomous Components for Multi-Sensor Fusion Classifiers," *Handbook of Pattern Recognition: Methods and Applications*, iConcept Press Ltd. 2013. (Invited)

## CONFERENCE PROCEEDINGS

1. **S. Kota**, A. du Plessis, A. N. Massaro, T. Chang, T. Al-Shargabhi, & R. B. Govindan, "A Frequency Based Spatial Filter to Mitigate Volume Conduction in Electroencephalogram Signals", *IEEE Engineering in Medicine and Biology Conference*, Orlando, FL, August 2016.
2. C. M. Pfeifer, J. M. Burnfield, **S. Kota**, T. W. Buster, S. Irons, C. Sulski, & C. A. Nelson, "Design of a Custom Heart Rate Control System for Pediatric Intelligently Controlled Assistive Rehabilitation Elliptical", *Rehabilitation Engineering and Assistive Technology Society of North America Conference,* Washington, DC, July 2016.
3. C. M. Pfeifer, J. M. Burnfield, **S. Kota**, T. W. Buster, S. Irons, D. Rowen, & C. A. Nelson, "Positive Reinforcement System Design for Therapeutic Devices", *Rehabilitation Engineering and Assistive Technology Society of North America Conference,* Washington, DC, July 2016.
4. L. Gupta, **S. Kota**, D. L. Molfese & R. Vaidyanathan, "Diversity-Based Selection of Components for Fusion Classifiers", *32nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, September 2010.

5. **S. Kota**, M. Mace, L. Gupta & R. Vaidyanathan, "A DCT-Gaussian Classification Scheme for Human-Robot Interface," *2009 IEEE/RSJ International Conference Intelligent Robots and Systems,* October 2009.
6. **S. Kota**, P. Yarlagadda, L. Gupta, & D. L. Molfese, "Central-Tendency Estimation and Nearest-Estimate Classification of Multi-Channel Evoked Potentials," *31st Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, September 2009.
7. L. Gupta, **S. Kota**, S. Murali, D. L. Molfese, & R. Vaidyanathan, "Dimensionality Reduction Strategies for the Design of Human Machine Interface Signal Classifiers," *The IEEE International Conference on Systems, Man, and Cybernetics*, October 2008.
8. **S. Kota**, L. Gupta, D. L. Molfese, & R. Vaidyanathan, "Spatio-Temporal Modeling for Dense Array ERP Classification," *30th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Vancouver, August 2008 (finalist for student paper competition)
9. H. Kook, L. Gupta, **S. Kota**, & D. L. Molfese, "A Dynamic Multi-Channel Decision-fusion Strategy to Classify Differential Brain Activity," *29th Annual International Conference of the Engineering in Medicine and Biology*, August 2007.
10. R. Vaidyanathan, M. Fargues, D. Lin, **S. Kota**, L. Gupta, & J. West, "A Dual-Mode Human-Machine Interface for Robotic Control based on Acoustic Sensitivity of the Aural Cavity," *The First (2006) IEEE RAS-EMBS International Conference on Biomedical Robotics and Biomechatronics*, February 2006

## CONFERENCE PRESENTATIONS

1. **S. Kota,** R. B. Govindan, T. Al-Shargabi, C. B. Swisher, A. Eze, L. Hitchings, S. Russo, R. Baker, G. L. Maxwell, A. du Plessis, S. B. Mulkey, "Cortico-Cortical Connectivity in Low-Risk Term Newborns Show Increased Global Neuronal Synchronization in Quiet State," The Third Annual International Symposium on the Fetal Brain, Washington, DC, November 2018.
2. S. B. Mulkey, **S. Kota,** R. B. Govindan, T. Al-Shargabi, C. B. Swisher, A. Eze, L. Hitchings, S. Russo, N. Herrera, R. McCarter, R. Baker, G. L. Maxwell, A. du Plessis, "Effect of Mode of Delivery on HRV and EEG in Low-Risk Term Newborns," The Third Annual International Symposium on the Fetal Brain, Washington, DC, November 2018.
3. **S. Kota**, A. Massaro, T. Chang, T. Al-Shargabi, C. Cristante, G. Vezina, A. du Plessis, & R. B. Govindan, "Quantitative Electroencephalogram (EEG) Monitoring For Prognostication of Outcome of Hypoxic Ischemic Encephalopathy (HIE) Newborns Undergoing Therapeutic Hypothermia (HIE)," Pediatric Academic Societies (PAS), Toronto, Canada, May 2018.
4. A. Massaro, T. Al-Shargabi, **S. Kota,** S. Mulkey, G. Vezina, M. Metzler, T. Chang, A. du Plessis, R. B. Govindan, "Validation of Novel Quantitative Heart Rate Variability (HRV) Metrics as Physiological Biomarkers of Brain Injury in Neonates with Hypoxic Ischemic Encephalopathy (HIE)," Pediatric Academic Societies (PAS), Toronto, Canada, May 2018.
5. S. Mulkey, **S. Kota,** C. B. Swisher, L. Hitchings, M. Metzler, Y. Wang, R. Baker, G. Maxwell, A. du Plessis, & R. B. Govindan, "Autonomic Nervous System Development in a Prematurely Extrauterine Environment is Impaired Despite Normal Brain Imaging," Pediatric Academic Societies (PAS), Toronto, Canada, May 2018.
6. **S. Kota**, A. N. Massaro, T. Chang, T. Al-Shargabi, C. Cristante, G. Vezina, A. du Plessis, & R. B. Govindan, "Continuous Monitoring of EEG Delta Power in Hypoxic Ischemic Encephalopathy, " *The Second Annual International Symposium on the Fetal Brain*, Washington, DC, August 2017.
7. R. B. Govindan, S. Mulkey, **S. Kota**, N. Niforatos-Andescavage, T. Al-Shargabi, C. B. Swisher, C. Cristante, & A. du Plessis, "Correlation Between EEG Delta Activity and Heart Rate Spectral Powers in Preterm Infants," *Organization of Human Brain Mapping*, Vancouver, June 2017.
8. R. B. Govindan, **S. Kota**, A. Massaro, T. Al-Shargabi, & A. du Plessis, "Mitigating the Effects of Ventilator-Related Oscillations to Reliably Quantify Baroreflex Function", *IEEE Engineering in Medicine and Biology Conference*, Orlando, FL, August 2016.

9. **S. Kota**, C. Cortesa, & D. L. Molfese, "Relative Spectral Power based Clustering of Dense-Array Event Related Potentials", *Biomedical Engineering Society Conference*, Seattle, October 2013.
10. I. T. Petersen, J. E. Bates, K. M. Kelsey, C. M. Hudac, **S. Kota**, C. Cortesa, D. L. Molfese, & A. D. Staples, "N2 Latencies Associated with Self-Regulation in Toddlers," *25th annual Association for Psychological Sciences Convention*, Washington, May 2013.
11. **S. Kota**, C. Cortesa, & D. L. Molfese, "Spectral Analysis of Event Related Potentials during Auditory Oddball in College Football Players," *Midwest Biomedical Engineering Career Conference*, Chicago April 2013.
12. I. T. Petersen, J. E. Bates, K. Kelsey, C. Hudac, **S. Kota**, C. Cortesa, D. L. Molfese, & A. D. Staples, "Longer P3 Latencies Associated with Externalizing Behavior Problems in Young Children," Society for Research in Child Development, Seattle, April 2013.
13. **S. Kota**, K. M. Kelsey, J. B. Rigoni, & D. L. Molfese, "Change in Relative Delta Power During Attention Task to Index Sport Related Concussion", *Biomedical Engineering Society Conference,* Atlanta, GA, October 2012.
14. **S. Kota**, K. M. Kelsey, J. B. Rigoni, & D. L. Molfese, "Feasibility of Event-Related Potentials as a Sideline Measure of Concussion", *2nd Conference on Concussion in Athletics: From Brain to Behavior*, State College, October 2012.
15. D. L. Molfese, C. M. Hudac, C. Cortesa, **S. Kota**, L. A. Devlin, & P. Radmacher, "Contrasting the use of MMN and Equal Probability Paradigms to Study Memory in Late Preterm and Term Infants," *6th Conference on Mismatch Negativity (MMN) and its Clinical and Scientific Applications*, The Graduate Center, CUNY, New York, NY, May 2012.
16. C. M. Hudac, **S. Kota**, J. Nedrow, & D. L. Molfese, Neural Mechanisms Underlying Neuro-Optometric Rehabilitation Following Traumatic Brain Injury. *Annual Neuro-Optometric Rehabilitation Association*, Memphis, TN, April 2012.
17. C. M. Hudac, N. Petro, K. Meidlinger, R. Haslam, **S. Kota**, J. Nedrow, & D. L. Molfese, "Correction of Visual Dysfunction Following Traumatic Brain Injury during Stroop Color Naming Task", *19th Annual Cognitive Neuroscience Society Meeting*, Chicago, April 2012.
18. D. L. Molfese, **S. Kota**, C. M. Hudac, J. Nedrow, M. Smith, & A. Davidson, "Sports Concussion: Present & Future", *6th Brain Injury Conference*, Kearney, NE, March 2012.
19. C. M. Hudac, V. Molfese, **S. Kota**, D. Gozal, & D. L. Molfese, "Effects of Minor Sleep Loss on Speech Processing in 6-year Olds Using EEG," Accepted for *17th Annual Meeting of the Organization of Human Brain Mapping*, Quebec City, June 2011.
20. R. Vaidyanathan, M. P. Fargues, L. Gupta, R. Kurcan, **S. Kota**, D. Lin & R. D. Quinn, " A Dual Mode Aural Human-Robot Teleoperation Interface", *4th International Symposium of Adaptive Motion of Animals and Machines*, Cleveland, OH, USA, June 2008.

## INVITED PRESENTATIONS

- S. Kota, "Signal Processing in Healthcare," Andhra Loyola Institute of Engineering and Technology, India, December 2016.
- S. Kota, "Spatio-Temporal Analysis of Dense Array EEG to Assess Neurooptometric Rehabilitation", Department of Applied Mechanics, Indian Institute of Technology - Madras, March 2014.
- S. Kota, L. Gupta, D. L. Molfese, R. Vaidyanathan "Designing Human Machine Interface Classifiers", GMR Institute of Technology, Rajam, India, September 2010.

## WORKSHOPS ORGANIZED

- D. L. Molfese, S. Kota, & C. M. Hudac, ERP Testing, University of Nebraska Lincoln, (March 2012, October 2011, July 2011)

## WORKSHOPS AND TRAINING ATTENDED

- Cleveland NeuroDesign Entrepreneur Workshop, Case Westerns Reserve University, Cleveland, Ohio, September 2022.
- Eye tracking Workshop. Directed by Mike Dodd, University of Nebraska - Lincoln, Lincoln.
- Write Winning Grant Proposals. Directed by John D. Robertson. University of Nebraska-Lincoln, Lincoln, NE, March 21, 2014.
- A New Look at Neurological Shoulder Pain: A Clinical and Conceptual Workshop. Presented by Susan Ryerson, Madonna Rehabilitation Hospital, Lincoln, NE, January 31 – February 2, 2014.
- EEGLAB Workshop. Directed by Scott Makeig, Swartz Center for Computational Neuroscience at University of California, San Diego, CA, November 14 – 18, 2013.
- Trauma Across Life Span. Directed by Bruce Perry. Department of Health and Human Services, Lincoln, NE, September 12 – 13, 2013.
- Spatio-temporal Workshop: Directed by Andrew Finley and Sudipto Banerjee. University of Nebraska-Lincoln, Lincoln, NE, October 15-16, 2012.

## REVIEWER – GRANTS

- National Institute of Disability, Independent Living, and Rehabilitation Research (NIDILRR)

## EDITORIAL BOARD

- Associate Editor, International Journal of Behavior Research and Psychology
- Associate Editor, Student Paper Competition, IEEE Engineering in Medicine and Biology Society

## TECHNICAL ADVISORY BOARD

- International Conference on Machine Intelligence Application to Power, Signal Processing, Communication and Control, Rajam, India, September 2011.

## REVIEWER – JOURNAL

- ASME Journal of Medical Devices
- Developmental Neuropsychology
- IEEE Signal Processing Letters
- International Journal of Information Technology and Decision Making (IJITDM)
- Journal of Engineering in Medicine
- Journal of NeuroEngineering and Rehabilitation
- Neurocomputing
- Pediatric Research
- The Open Biomedical Engineering Journal

## REVIEWER – CONFERENCE

- International Stroke Conference (2015 – 2020)
- Organization of Human Brain Mapping (2013 - 2020)
- IEEE Engineering in Medicine and Biology Society Conference (2009 - Present)
- Biomedical Engineering Society Conference (2012 – Present)
- Frontiers in Intelligent Computing Theory & Applications, India (2014)
- International Conference on Biomedical Engineering, Manipal Institute of Technology (2011)
- The International Conference on Informatics, Cybernetics and Computer Applications (2010)
- First International Conference on Integrated Intelligent Computing, Bangalore, India (2010)
- SIGAI Workshop on Emerging Research Trends in Artificial Intelligence, Navi Mumbai (2010)

## TECHNICAL SKILLS

- Mathematical Packages: MATLAB, Simulink
- Hardware Description Languages: Verilog, VHDL
- Programming Languages: Java, Labview, C, Python
- Microcontroller Programming: Arduino, Raspberry Pi
- Other Software packages: E-Prime, EP toolkit, NEMO, SPSS, SAS, Net Station
- Operating Systems: Windows and Mac
- Basic Processing: Microsoft office including Power Point, Excel, Word.

## PROFESSIONAL SERVICE /EXPERIENCE

- NRIVA Adopt a Student, Become a Tutor 2020 – 2022
- Treasurer/Member, Postdoctoral Advisory Council, University of Nebraska Lincoln 2011 – 2013
- Judge, Nebraska Robotics Expo 2012 – 2015
- Volunteer, Biomedical Engineering Society Conference 2012 – 2013
- Reviewer, UCARE Applications at the University of Nebraska Lincoln 2013

## PROFESSIONAL MEMBERSHIP

- Institute of Electrical and Electronics Engineers
- IEEE Engineering in Medicine and Biology Society
- IEEE System, Man and Cybernetics
- Newborn Brain Society