Technical Reports

2007


2. CAS/CNS-TR-07-002 “Intersubject regularity in the intrinsic shape of human V1” by Oliver Hinds, Jonathan Polimeni, Niranjini Rajendran, Mukund Balasubramanian, Lawrene Wald, Diana Rosas, Matthew Frosch, Jean Augustinack, Graham Wiggins, Andreas Potthast, Bruce Fischl, and Eric Schwartz

3. CAS/CNS-TR-07-003 “Default ARTMAP 2” by Gregory Amis and Gail Carpenter

2006


3. CAS/CNS-TR-06-003 “Laminar cortical dynamics of visual form and motion interactions during coherent object motion perception” by Julia Berzhanskaya, Stephen Grossberg and Ennio Mingolla

4. CAS/CNS-TR-06-004 “Multi-area visuotopic map complexes in macaque striate and extra-striate cortex” by Jonathan Polimeni, Mukund Balasubramanian and Eric Schwartz

5. CAS/CNS-TR-06-005 “Space, time, and learning in the Hippocampus: How fine spatial and temporal scales are expanded into population codes for behavioral control” by Anatolli Gorchetchnikov and Stephen Grossberg

6. CAS/CNS-TR-06-006 “Simulating effects of learning and lesions with a model of intrinsic and synaptically gated responses of striatal cholinergic interneurons” by Can Ozan Tan and Daniel Bullock

7. CAS/CNS-TR-06-007 “Texture segregation by visual cortex: Perceptual grouping, attention, and learning” by Rushi Bhatt, Gail Carpenter, and Stephen Grossberg


10. CAS/CNS-TR-06-010 “Miniature eye movements enhance fine spatial detail” by Michele Rucci, Ramon Iovin, Martina Poletti, and Fabrizio Santini


12. CAS/CNS-TR-06-012 “From synapse to self: Spikes, synchrony, and attentive learning by laminar thalamocortical circuits” by Stephen Grossberg and Massimiliano Versace

13. CAS/CNS-TR-06-013 “From stereogram to surface: How the brain sees the world in depth” by Liang Fang and Stephen Grossberg

2005

1. CAS/CNS-TR-05-001 “A theoretical analysis of the influence of fixational instability on the development of thalamocortical connectivity” by Antonino Casile and Michele Rucci

2. CAS/CNS-TR-05-002 “Self-organizing hierarchical knowledge discovery by an ARTMAP information fusion system” by Gail Carpenter and Siegfried Martens


4. CAS/CNS-TR-05-004 “Active estimation of distance in a robotic vision system that replicates human eye movement” by Fabrizio Santini and Michele Rucci

5. CAS/CNS-TR-05-005 “Brain categorization: Learning, attention, and consciousness” by Stephen Grossberg, Gail Carpenter, and Bilgin Ersoy

6. CAS/CNS-TR-05-006 “DISCOV: A neural model of colour vision, with applications to image processing and classification” by Suhas Chelian and Gail Carpenter

7. CAS/CNS-TR-05-007 “Physical limits to spatial resolution of optical recording: Clarifying the spatial structure of cortical hypercolumns” by Jonathan Polimeni, Domhnall Granquist-Fraser, Richard Wood, and Eric Schwartz

8. CAS/CNS-TR-05-008 “Logic and phenomenology of incompleteness in illusory figures: New cases and hypotheses” by Baingio Pinna and Stephen Grossberg


10. CAS/CNS-TR-05-010 “EyeRIS: A general purpose system for eye movement contingent display control” by Fabrizio Santini, Gabriel Redner, Ramon Iovin, Michele Rucci
2004

1. CAS/CNS-TR-04-001  “Self-organizing hierarchical knowledge discovery by an ARTMAP image fusion system” by Gail Carpenter, Siegfried Martens, and Ogi Ogas

2. CAS/CNS-TR-04-002  “Laminar cortical dynamics of 3D surface perception: Stratification, transparency, and neon color spreading” by Stephen Grossberg and Arash Yazdanbakhsh

3. CAS/CNS-TR-04-003  “A neuromorphic model for achromatic and chromatic surface representation of natural images” by Simon Hong and Stephen Grossberg

4. CAS/CNS-TR-04-004  “From parallel sequence representations to calligraphic control: A conspiracy of neural circuits” by Daniel Bullock

5. CAS/CNS-TR-04-005  “Fast synchronization of perceptual grouping in laminar visual cortical circuits” by Arash Yazdanbakhsh and Stephen Grossberg

6. CAS/CNS-TR-04-006  “Neural modeling and imaging of the cortical interactions underlying syllable production” by Frank Guenther, Satrajit Ghosh, and Jason Tourville

7. CAS/CNS-TR-04-007  “A laminar cortical model of stereopsis and 3D surface perception: Closure and da Vinci stereopsis” by Yongqiang Cao and Stephen Grossberg

8. CAS/CNS-TR-04-008  “Biologically inspired approaches to automated feature extraction and target recognition” by Gail Carpenter, Siegfried Martens, Ennio Mingolla, Ogi Ogas, and Chaitanya Sai


10. CAS/CNS-TR-04-010  “CEDI: A neural model of colour vision, with applications to image processing and classification” by Suhas Chelian and Gail Carpenter

11. CAS/CNS-TR-04-011  “Laminar cortical dynamics of visual form and motion interactions during coherent object motion perception” by Julia Berzhanskaya, Stephen Grossberg, and Ennio Mingolla

12. CAS/CNS-TR-04-012  “START: A bridge between emotion theory and neurobiology through dynamic system modeling” (a commentary on “Bridging emotion theory and neurobiology through dynamic system modeling” by Marc Lewis) by Stephen Grossberg.

13. CAS/CNS-TR-04-013  “Modeling the possible influences of eye movements on the refinement of cortical direction selectivity” by Olga Parsons and Michele Rucci

14. CAS/CNS-TR-04-014  “Fixational instability and natural image statistics: Implications for early visual representations” by Michele Rucci and Antonino Casile


2003

1. CAS/CNS-TR-03-001  “From normal brain and behavior to schizophrenia” by Stephen Grossberg

2. CAS/CNS-TR-03-002  “A laminar cortical model for 3D perception of slanted and curved surfaces and of 2D images: Development, attention, and bistability” by Stephen Grossberg and Gurumurthy Swaminathan

3. CAS/CNS-TR-03-003  “Effects of highlights on gloss perception” by Julia Berzhanskaya, Gurumurthy Swaminathan, Jacob Beck, and Ennio Mingolla

4. CAS/CNS-TR-03-004  “A model of cerebellar adaptation of grip forces during lifting” by Antonio Ulloa, Daniel Bullock, and Bradley Rhodes

5. CAS/CNS-TR-03-005  “How does the cerebral cortex work? Development, learning, attention, and 3D vision by laminar circuits of visual cortex” by Stephen Grossberg

6. CAS/CNS-TR-03-006  “Changes in the McGurk effect across phonetic contexts” by Michelle Hampson, Frank Guenther, Michael Cohen, and Alfonso Nieto-Castanon

7. CAS/CNS-TR-03-007  “Linking attention to learning, expectation, competition and consciousness” by Stephen Grossberg

8. CAS/CNS-TR-03-008  “Default ARTMAP” by Gail Carpenter

9. CAS/CNS-TR-03-009  “Neural Dynamics of autistic behaviors: Cognitive, emotional, and timing substrates” by Stephen Grossberg and Don Seidman

10. CAS/CNS-TR-03-010  “From working memory to long-term memory and back: Linked but distinct” by Stephen Grossberg
11. CAS/CNS-TR-03-011  “Bring ART into the ACT” by Stephen Grossberg
12. CAS/CNS-TR-03-012  “Linking visual cortex to visual perception: An alternative to the Gestalt bubble” by Stephen Grossberg
13. CAS/CNS-TR-03-013  “Linking brain to mind in normal behavior and schizophrenia” by Stephen Grossberg
14. CAS/CNS-TR-03-014  “Anisotropic interpolation on graphs: The combinatorial dirichlet problem” by Leo Grady and Eric Schwartz
15. CAS/CNS-TR-03-015  “Isoperimetric graph partitioning for data clustering and image segmentation” by Leo Grady and Eric Schwartz
18. CAS/CNS-TR-03-018  “Adaptive neural models of queuing and timing in fluent action” by Daniel Bullock
19. CAS/CNS-TR-03-019  “Isoperimetric partitioning: A new algorithm for graph partitioning” by Leo Grady and Eric Schwartz
21. CAS/CNS-TR-03-021  “The Graph Analysis Toolbox: Image processing on arbitrary graphs” by Leo Grady and Eric Schwartz
22. CAS/CNS-TR-03-022  “A cortical and cerebellar parcellation system for speech studies” by Jason Tourville and Frank Guenther
23. CAS/CNS-TR-03-023  “Information fusion and hierarchical knowledge discovery by ARTMAP neural networks” by Gail Carpenter, Siegfried Martens, Ogi Ogas, and Bradley Rhodes
24. CAS/CNS-TR-03-024  “Learning and production of movement sequences: Behavioral, neurophysiological, and modeling perspectives” by Bradley Rhodes, Daniel Bullock, William Verwey, Bruno Averbeck, and Michael Page

2002

1. CAS/CNS-TR-02-001  “Motoneuron recruitment” by Daniel Bullock
2. CAS/CNS-TR-02-002  “A laminar cortical model of stereopsis and three-dimensional surface perception” by Stephen Grossberg and Piers Howe

3. CAS/CNS-TR-02-003  “Competitive queuing for planning and serial performance” by Daniel Bullock and Bradley Rhodes

4. CAS/CNS-TR-02-004  “Measuring the depth perception invoked by a simple, sustained, polarity-reversed stereogram” by Piers Howe and Takeo Watanabe

5. CAS/CNS-TR-02-005  “Neural models of seeing and thinking” by Stephen Grossberg

6. CAS/CNS-TR-02-006  “A neural model of how the cortical subplate coordinates the laminar development of orientation and ocular dominance maps” by Stephen Grossberg and Aaron Seitz

7. CAS/CNS-TR-02-007  Neural dynamics of learning and performance of fixed sequences: Latency pattern reorganizations and the N-STREAMS model by Bradley Rhodes and Daniel Bullock

8. CAS/CNS-TR-02-008  “Resonant neural dynamics of speech perception” by Stephen Grossberg

9. CAS/CNS-TR-02-009  “Representation of sound categories in auditory cortical maps” by Frank Guenther, Alfonso Nieto-Castanon, Satrajit Ghosh and Jason Tourville

10. CAS/CNS-TR-02-010  “ROI-Based analysis of functional imaging data” by Alfonso Nieto-Castanon, Satrajit Ghosh, Jason Tourville and Frank Guenther

11. CAS/CNS-TR-02-011  “ARTMAP neural networks for information fusion and data mining: Map production and target recognition methodologies” by Olga Parsons and Gail Carpenter

12. CAS/CNS-TR-02-012  “Pointmap: A real-time memory-based learning system with on-line and post-training pruning” by Norbert Kopco and Gail Carpenter

2001

1. CAS/CNS-TR-01-001  "A neural model of multidigit numerical representation and comparison" by Dmitry Repin and Stephen Grossberg

2. CAS/CNS-TR-01-002  "Linking the laminar circuits of visual cortex to visual perception" by Stephen Grossberg

3. CAS/CNS-TR-01-003  "Modeling the contributions of the exocytotic machinery and receptor desensitization to short- and long-term plasticity of synapses between neocortical pyramidal neurons" by Murat Okatan and Michael Cohen
4. CAS/CNS-TR-01-004 "Thalamocortical dynamics of the McCollough effect: Boundary-surface alignment through perceptual learning" by Stephen Grossberg, Seungwoo Hwang and Ennio Mingolla

5. CAS/CNS-TR-01-005 "A model for the genesis of arterial pressure Mayer waves from heart rate and sympathetic activity" by Christopher Myers, Michael Cohen, Dwain Eckberg and J. Andrew Taylor.

6. CAS/CNS-TR-01-006 "A neural model of how the brain represents and compares multi-digit numbers: Spatial and categorical processes" by Stephen Grossberg and Dmitry Repin

7. CAS/CNS-TR-01-007 "A neural circuit for coordinating reaching with grasping: Autocompensating variable initial apertures, perturbations to target size, and perturbations to target orientation" by Antonio Ulloa and Daniel Bullock

8. CAS/CNS-TR-01-008 "A neural circuit model for prospective control of interceptive reaching" by Joost Dessing, Daniel Bullock, C. (Lieke) Peper and Peter Beek

9. CAS/CNS-TR-01-009 "ARTMAP neural network classification of land use change" by Byron Shock, Gail Carpenter, Sucharita Gopal and Curtis Woodcock

10. CAS/CNS-TR-01-010 "A neural network method for land use change classification, with application to the Nile River delta" by Gail Carpenter, Sucharita Gopal, Byron Shock and Curtis Woodcock

11. CAS/CNS-TR-01-011 “Neural substrates of visual percepts, imagery, and hallucinations” by Stephen Grossberg (A commentary on “Mental imagery: In search of a theory” by Zenon Pylyshyn.)


2000

1. CAS/CNS-TR-2000-001 "Classification of incomplete data using the fuzzy ARTMAP neural network" by Eric Granger, Mark Rubin, Stephen Grossberg and Pierre Lavoie

2. CAS/CNS-TR-2000-002 "ART neural networks for medical data analysis and fast distributed learning" by Gail Carpenter and Boriana Milenova

3. CAS/CNS-TR-2000-003 "Frequency-dependent synaptic potentiation and depression induced by Hebbian pairing in cortical pyramidal neurons” by Murat Okatan and Stephen Grossberg

5. CAS/CNS-TR-2000-005 "ART neural networks: Distributed coding and ARTMAP applications" by Gail Carpenter


7. CAS/CNS-TR-2000-007 "Brain differently changes its algorithms in parallel processing of visual information" by Andrzej Przybyszewski and Daniel Pollen

8. CAS/CNS-TR-2000-008 "Context-sensitive binding by the laminar circuits of V1 and V2: A unified model of perceptual grouping, attention, and orientation contrast" by Rajeev Raizada and Stephen Grossberg


11. CAS/CNS-TR-2000-011 "A neural model of how horizontal and interlaminar connections of visual cortex develop into adult circuits that carry out perceptual grouping and learning" by Stephen Grossberg and James Williamson


15. CAS/CNS-TR-2000-015 "A comment on Anderson's and Todorovic's explanations of White's effect" by Piers Howe


19. CAS/CNS-TR-2000-019 "Laminar cortical architecture" by Stephen Grossberg
20. CAS/CNS-TR-2000-020 "Cortical models for movement control" by Daniel Bullock


22. CAS/CNS-TR-2000-022 "Ten questions for cognitive and neural models of learning and memory” by Gail Carpenter

23. CAS/CNS-TR-2000-023 "How laminar frontal cortex and basal ganglia circuits interact to control planned and reactive saccades" by Joshua Brown, Daniel Bullock, and Stephen Grossberg


26. CAS/CNS-TR-2000-026 "Linking visual cortical development to visual perception" by Stephen Grossberg

27. CAS/CNS-TR-2000-027 "On the computational modeling of human vision" by Jacob Beck


1999


2. CAS/CNS-TR-99-002 “Brain learning, attention, and consciousness” by Stephen Grossberg

3. CAS/CNS-TR-99-003 “A comment on “Assimilation of achromatic color cannot explain the brightness effects in the achromatic neon effect” by Marc K. Albert” by Stephen Grossberg


5. CAS/CNS-TR-99-005 “Building adaptive basis functions with a continuous self-organizing map” by Marcos Campos and Gail Carpenter
6. CAS/CNS-TR-99-006  “A familiarity-based bound on the expected error rate for classification with the fuzzy ARTMAP neural network” by Mark Rubin


8. CAS/CNS-TR-99-008  “Contrast-sensitive perceptual grouping and object-based attention in the laminar circuits of primary visual cortex” by Stephen Grossberg and Rajeev

9. CAS/CNS-TR-99-009  “An investigation of the effects of categorization and discrimination training on auditory perceptual space” by Frank Guenther, Fatima Husain, Michael Cohen, and Barbara Shinn-Cunningham


11. CAS/CNS-TR-99-011  “How the basal ganglia use parallel excitatory and inhibitory learning pathways to selectively respond to unexpected rewarding cues” by Joshua Brown, Daniel Bullock, and Stephen Grossberg


13. CAS/CNS-TR-99-013  “Distributed ARTMAP” by Gail Carpenter and Boriana Milenova

14. CAS/CNS-TR-99-014  “Comparison of classifiers for radar emitter type identification” by Eric Granger, Stephen Grossberg, Pierre Lavoie, and Mark Rubin

15. CAS/CNS-TR-99-015  “Favoring generalists over specialists: How attentional biasing improves perceptual category learning” by James Williamson


17. CAS/CNS-TR-99-017  “Temporal dynamics of binocular disparity processing with corticogeniculate interactions” by Stephen Grossberg and Alexander Grunewald


20. CAS/CNS-TR-99-020  “How hallucinations may arise from brain mechanisms of learning, attention, and volition” by Stephen Grossberg
21. CAS/CNS-TR-99-021  “The laminar architecture of visual cortex and image processing technology” by Stephen Grossberg

22. CAS/CNS-TR-99-022  "Brain feedback and adaptive resonance in speech perception" [Commentary on "Merging information in speech recognition: Feedback is never necessary" by D. Norris, J.M. McQueen, and A. Culter ] by Stephen Grossberg


24. CAS/CNS-TR-99-024  "A neural model of how the brain represents and compares numbers" by Stephen Grossberg and Dmitry Repin

25. CAS/CNS-TR-99-025  "Model of the classification of English vowels by Spanish speakers" by Fatima Husain, Michiro Negishi, Michael Cohen and Frank Guenther

26. CAS/CNS-TR-99-026  "Binaural cues for distance and direction of nearby sound sources" by Barbara Shinn-Cunningham, Scott Santarelli and Norbert Kopco

27. CAS/CNS-TR-99-027  "Self-organization of topographic mixture networks using attentional feedback" by James Williamson

28. CAS/CNS-TR-99-028  "Combining distributed and localist computations in real-time neural networks" a BBS Commentary on "Connectionist modelling in psychology: A localist manifesto by Mike Page" by Gail Carpenter

29. CAS/CNS-TR-99-029  "Localist but distributed representations" a BBS Commentary on "Connectionist modelling in psychology: A localist manifesto by Mike Page" by Stephen Grossberg

30. CAS/CNS-TR-99-030  "The perceptual genesis of near versus far in pictorial stimuli" by Brigitta Dresp, Severine Durand and Stephen Grossberg


32. CAS/CNS-TR-99-032  "Classification of incomplete data using the fuzzy ARTMAP neural network" by Eric Granger, Mark Rubin, Stephen Grossberg, and Pierre Lavoie

1998

1. CAS/CNS-TR-98-001  “Synaptic Depression and Cortical Gain Control” by Stephen Grossberg

2. CAS/CNS-TR-98-002  “Articulatory Tradeoffs Reduce Acoustic Variability During American English/r/Production” by Frank Guenther, Carol Espy-Wilson, Suzanne Boyce, Melanie Matthies, Majid Zandipour, and Joseph Perkell

4. CAS/CNS-TR-98-004 “Neural Dynamics of Perceptual Order and Context Effects for Variable-Rate Speech Syllables” by Ian Boardman, Stephen Grossberg, Christopher Myers, and Michael Cohen


7. CAS/CNS-TR-98-007 “Visual Looming as a range sensor for mobile robots” by Erol Sahin and Paolo Gaudiano

8. CAS/CNS-TR-98-008 “Real-time restoration of images degraded by uniform motion blur in foveal active vision systems” by Giorgio Bonmassar and Eric Schwartz


10. CAS/CNS-TR-98-010 “Mobile robot range sensing through visual looming” by Erol Sahin and Paolo Gaudiano

11. CAS/CNS-TR-98-011 “Mobile robot sensor fusion with fuzzy ARTMAP” by Siegfried Martens, Paolo Gaudiano, and Gail Carpenter

12. CAS/CNS-TR-98-012 “Attention in Depth: Disparity and Occlusion Cues Facilitate Multi-Element Visual Tracking” by Lavanya Viswanathan and Ennio Mingolla


17. CAS/CNS-TR-98-017 “Segmentation ART: A neural network for word recognition from continuous speech” by Gail Carpenter and Frank Wilson

19. CAS/CNS-TR-98-019  “Neural dynamics of binocular brightness perception” by Stephen Grossberg and Frank Kelly

20. CAS/CNS-TR-98-020  “Outcome prediction for unipolar depression” by Mark Rubin, Michael Cohen, Joanne Luciano and Jacqueline Samson

21. CAS/CNS-TR-98-021  “In what coordinates do motor cortical cells code the direction of arm movements” by Robert Ajemian, Daniel Bullock and Stephen Grossberg

22. CAS/CNS-TR-98-022  “A neural model of how visual cortex develops a laminar architecture capable of adult perceptual grouping” by Stephen Grossberg and James Williamson


25. CAS/CNS-TR-98-025  “Building adaptive basis functions with a continuous SOM” by Marcos Campos and Gail

26. CAS/CNS-TR-98-026  “Neural dynamics of 3-D surface perception: Figure-ground separation and lightness perception” by Frank Kelly and Stephen

27. CAS/CNS-TR-98-027  “Familiarity discrimination of radar pulses” by Eric Granger, Stephen Grossberg, Mark Rubin, and William Streilein

28. CAS/CNS-TR-98-028  “Neural sensor fusion for spatial visualization on a mobile robot” by Siegfried Martens, Gail Carpenter, and Paolo Gaudiano


30. CAS/CNS-TR-98-030  “Neural models of normal and abnormal behavior: What do schizophrenia, parkinsonism, attention deficit disorder, and depression have in common?” by Stephen Grossberg

31. CAS/CNS-TR-98-031  “Topographic shear and the relation of ocular dominance columns to orientation columns in prime and cat visual cortex” by Richard J. Wood and Eric L. Schwartz

33. CAS/CNS-TR-98-033  “A neural model for self organizing feature detectors and classifiers in a network hierarchy” by James Williamson

34. CAS/CNS-TR-98-034  “Photo-realistic scenes with cast shadows show no above/below search asymmetries for illumination direction” by Robert Cunningham, Jacob Beck and Ennio Mingolla

35. CAS/CNS-TR-98-035  “A neural network method for efficient vegetation mapping” by Gail Carpenter, Sucharita Gopal, Scott Macomber, Siegfried Martens, Curtis Woodcock and Janet Franklin

1997

1. CAS/CNS-TR-97-001  “A Self-Organizing Neural System for Learning to Recognize Textured Scenes” by Stephen Grossberg and James Williamson


5. CAS/CNS-TR-97-005  “Motion Capture Implies Motion Extrapolation” by Stephen Grossberg


10. CAS/CNS-TR-97-010  “Intraspeaker comparisons of acoustic and articulatory variability in American English /r/ productions” by Frank Guenther, Carol Espy-Wilson, Suzanne Boyce, Melanie Matthes, Majid Zandipour, and Joseph Perkell


17. CAS/CNS-TR-97-017  “Birth of a learning law” by Stephen Grossberg


**1996**


5. CAS/CNS-TR-96-005  “Distributed ART Networks for Learning, Recognition, and Prediction” by Gail Carpenter  *Proceedings of the World Congress on Neural Networks* (WCNN’96), 333-344, 1996.

6. CAS/CNS-TR-96-006  “Distributed Activation, Search, and Learning by ART and ARTMAP Neural Networks” by Gail Carpenter  *Proceedings of the International Conference on Neural Networks* (ICNN’96), 244-249, 1996.

7. CAS/CNS-TR-96-007  “Pitch-Based Streaming in Auditory Perception” by Stephen Grossberg  In N. Griffith (Ed.),  *Creative Networks*. Cambridge, MA,


13. CAS/CNS-TR-96-013  “Priming of pop-out does not affect the shooting line illusion” by Gregory Gancarz and Jeremy Wolfe


15. CAS/CNS-TR-96-015  “ARTEX: A self-organizing architecture for classifying image regions” by Stephen Grossberg and James Williamson


17. CAS/CNS-TR-96-017  “ARTMAP-IC and Medical Diagnosis: Instance Counting and Inconsistent Cases” by Gail Carpenter and Natalya Markuzon  *Neural Networks* 11, 323-336,


28. CAS/CNS-TR-96-028  “Automated construction of a hierarchy of self-organized neural network classifiers” by Harald Ruda and Magnus Snorrasa


34. CAS/CNS-TR-96-034 “Approaching visual search in photo-realistic scenes” by Robert Cunningham, Jacob Beck, and Ennio Mingolla


1995

1. CAS/CNS-TR-95-001 “The Effects of L(+), D(-), and DL-2-amino-4-phosphonobutyrate (APB) on Electroretinogram and Ganglion Cell Activity in the Cat Retina” by A.W. Przybyszewski, N.J. Sucher, and O.J. Grusser


7. CAS/CNS-TR-95-007 “Inertial Load Compensation by a Model Spinal Circuit During Single Joint Movement” by Daniel Bullock, Jose Luis Contreras-Vidal, and Stephen Grossberg


10. CAS/CNS-TR-95-010  “Mach bands: How many models are possible? Recent experimental findings and modeling attempts” by Luiz Pessoa


18. CAS/CNS-TR-95-018  “Mach band attenuation by adjacent stimuli” by Luiz Pessoa


27. CAS/CNS-TR-95-027  “How Listing's law may emerge from neural control of reactive saccades” by Christopher Pribe and Daniel Bullock


1994

1. CAS/CNS-TR-94-001  “Synthetic Aperture Radar Processing by a Multiple Scale Neural System for Boundary and Surface Representation” by Stephen Grossberg, Ennio Mingolla, and James Williamson *Neural Networks* 8 (Special Issue on Automatic Target Recognition), 1005-1028, 1995.

2. CAS/CNS-TR-94-002  “A Real-Time, Unsupervised Neural Network Model for the Control of a Mobile Robot in a Nonstationary Environment” by Eduardo Zalama, Paolo Gaudiano, and Juan L’opez Coronado *Neural Networks* 8, 103-123, 1995.


13. CAS/CNS-TR-94-013 “A neuron model with variable ion concentrations” by Alexander Grunewald


18. CAS/CNS-TR-94-018 “Adaptive tessellation CMAC” by Jonathan Chey


29. CAS/CNS-TR-94-029  “Global motion configuration can override local motion contrast” by Jonathan Chey and Ennio Mingolla


35. CAS/CNS-TR-94-035  “Opening the mind's eye” by Stephen Grossberg

36. CAS/CNS-TR-94-036  “A low dimensional model of coordinated eye and head movements” by Andrzej Przybyszewski and A. H. Clarke

37. CAS/CNS-TR-94-037  “Neural dynamics of phonetic trading relations for variable-rate CV syllables” by Ian Boardman, Stephen Grossberg, and Michael Cohen


1993


4. CAS/CNS-TR-93-004 “Neural control of interlimb coordination and gait timing in bipeds and quadrupeds” by Michael Cohen, Stephen Grossberg, and Christopher Pribe


20. CAS/CNS-TR-93-020 “Eliminating redundant training data using unsupervised clustering techniques” by Paul Gonsalves, Magnus Snorrason, and Alper Caglayan Proceedings of the


26. CAS/CNS-TR-93-026 “Neural pattern recognition on multichannel input representation” by Kunihiko Iizuka


37. CAS/CNS-TR-93-037  “Self-organizing grammar induction using a neural network model” by Christian Mannes


40. CAS/CNS-TR-93-040  “A fast BCSFCS algorithm for image segmentation” by Jose Contreras-Vidal and J. Mario Aguilar

41. CAS/CNS-TR-93-041  “Navite: A neural network system for sensory-based robot navigation” by J. Mario Aguilar and Jose Contreras-Vidal

42. CAS/CNS-TR-93-042  “Extracted memory from temporal patterns using adaptive resonance and recurrent network” by Osamu Araki


44. CAS/CNS-TR-93-044  “A biochemical model of human oculomotor plant kinematics based upon geometric algebra” by Michael Cohen and Christopher Pribe

46. CAS/CNS-TR-93-046  “Neural pattern recognition with multi-scale pyramidal coding and selective attention” by Kunihiko Iizuka


53. CAS/CNS-TR-93-053  “A fast learning neural architecture for recognizing 3-D objects from multiple 2-D views” by Gary Bradski and Stephen Grossberg  *Neural Networks* (Special Issue on Automated Target Recognition) 8, 1053-1080, 1995.


55. CAS/CNS-TR-93-055  “A network for learning kinematics with application to human reaching models” by John Fiala

56. CAS/CNS-TR-93-056  “Unsupervised neural network for the control of a mobile robot” by Eduardo Zalama, Paolo Gaudiano, and Juan Lopez-Coronado


1992


1991


9. CAS/CNS-TR-91-009  “A neural network model for the spatial and temporal response of retinal ganglion cells” by Paolo Gaudiano


17. CAS/CNS-TR-91-017  “Multi-resonant boundary contour system” by Steve Lehar and Andrew Worth


