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Editorial: One Year as EiC, and Editorial-Board Changes at TNN

I AM ABOUT to start my second year of service as the Editor-in-Chief (EiC) of the IEEE TRANSACTIONS ON NEURAL NETWORKS (TNN). Needless to say, my first year as the EiC has been full of excitement and challenges. Transitioning this position from my predecessor to me went very smoothly during the months of September 2009 to January 2010. During the past year, we have accumulated 50+ Associate Editors (AEs) handling roughly 600 new submissions (not counting resubmissions and revised submissions). With the help of these AEs and my predecessor, I was quickly able to learn to do my job, and as such, the transition had very few glitches.

The easy part of my job is checking whether a submission is in compliance with our guidelines and where it is within the scope of the TRANSACTIONS, before it is assigned to an AE for handling. The difficult part of my job has been dealing with some papers with three or more reviewers, all of whom agreed to review them but for some reason failed to respond to repeated automatic-review reminders. AEs handling these papers have to take several extra steps to remind reviewers through phone calls or e-mails, look for replacement reviewers, or review the papers themselves. Most authors have been appreciative of the work of the AEs and reviewers, and they accept our decisions without a problem.

The backlog of papers has been kept short over the last year. We have maintained an organized printing and paper-acceptance schedule, with papers typically printed in the journal within 2–3 months of acceptance. Our page budget has been kept constant in the past few years (roughly 2060 pages per year), and we expect to hold the same page count for next year.

There are three special issues that are being organized this year. These include: 1) White-box nonlinear prediction models (organized by Bart Baesens, David Martens, Rudy Setiono, and Jacek Zurada); 2) Data-based optimization, control, and modeling (organized by Tianyou Chai, Zhongsheng Hou, Frank L. Lewis, and Amir Hussain); and 3) Online learning in kernel methods (organized by Jose C. Principe, Seiichi Ozawa, Sergios Theodoridis, Tulay Adali, Danilo P. Mandic, and Weifeng Liu). Interested authors should refer to the individual solicitations or contact the special-issue organizers for more details.

I would like to take this opportunity to thank the hard-working AEs whose terms have ended this year. They are Angelo Alessandri, Fahmida Chowdhury, Bhaskar DasGupta, Rene Doursat, Deniz Erdogmus, Mark Girolami, Barbara Hammer, Giacomo Indiveri, Stefanos Kollias, Chih-Jen Lin, Mark Plumbley, Jagath Rajapakse, George A. Rovithakis, Kate Smith-Miles, Changyin Sun, and Simon X. Yang. Thank you for your excellent service to TNN. I wish you much success in your future endeavors.

I would also like to welcome the following new AEs whose terms officially start on January 1, 2011 (K. Ikeda and J. Lu started on June 1, 2010):

- Marco Baglietto, DIST-University of Genova, Italy
- Lubica Benuskova, University of Otago, New Zealand
- Ivo Bukovsky, Czech Technical University in Prague, Czech Republic
- Tianping Chen, Fudan University, China
- Tom Heskes, Radboud University Nijmegen, The Netherlands
- Kazushi Ikeda, Nara Institute of Science and Technology, Japan
- Fakhri Karray, University of Waterloo, Canada
- Rhee Man Kil, Korea Advanced Institute of Science and Technology, Korea
- Robert Legenstein, Graz University of Technology, Austria
- Jinhu Lu, Chinese Academy of Sciences, China
- Yunqian Ma, Honeywell International Inc., USA
- Malik Magdon-Ismail, Rensselaer Polytechnic Institute, USA
- Mike Paulin, University of Otago, New Zealand
- Robi Polikar, Rowan University, USA
- Danil Prokhorov, Toyota Research Institute NA, USA
- Marco Wiering, University of Groningen, The Netherlands
- Vicente Zarzoso, University of Nice Sophia Antipolis, France

All the above AEs are established authorities in their respective fields and have been carefully selected on the basis of their achievements, their geographical diversity, and our needs for expertise on various subject areas of TNN. I look forward to working with them to make TNN an even better journal.

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DERONG LIU, *Editor-in-Chief*

Marco Baglietto (M'04) was born in Savona, Italy, in 1970. He received the Laurea degree in electronic engineering in 1995, and the Ph.D. degree in electronic engineering and computer science in 1999, both from the University of Genoa, Genoa, Italy.

He has been an Assistant Professor of Automatic Control in the Department of Communications, Computer and Systems Science, University of Genoa, since 1999. His current research interests include neural approximations, linear and nonlinear estimation, distributed-information control systems, and control of communication networks.

Dr. Baglietto is currently an Associate Editor for the IEEE Control Systems Society Conference Editorial Board. He has been a member of the guest editorial team of the Special Issue of the IEEE TRANSACTIONS ON NEURAL NETWORKS on "Adaptive Learning Systems in Communication Networks." He was a co-recipient of the 2004 Outstanding Paper Award of the IEEE TRANSACTIONS ON NEURAL NETWORKS.

Lubica "Luba" Benuskova received the Ph.D. degree in biophysics from Comenius University, Bratislava, Slovakia, in 1994.

She became an Associate Professor in the Department of Applied Informatics of the Faculty of Mathematics, Physics, and Informatics at Comenius University, in 2002. After, she served as a Director of the Center for Neurocomputation and Neuroinformatics in the Knowledge Engineering and Discovery Research Institute, Auckland University of Technology, Auckland, New Zealand, in 2007. Currently, she is a Senior Lecturer in the Department of Computer Science, University of Otago, Dunedin, New Zealand. She co-authored the book *Computational Neurogenetic Modelling* (New York, NY: Springer, 2007). Her current research interests include computational neuroscience, spiking neural networks, neural dynamics, neuroinformatics, bioinformatics, and consciousness/emotions.

Dr. Benuskova is currently a member of the Editorial Board of the peer-reviewed journal Neural Network World. She is a member of the IEEE Computational Intelligence Society and Otago Chapter of the Society for Neuroscience. Recently she has become a Professional member of the Royal Society of New Zealand.

Ivo Bukovsky received the Ph.D. degree in field of control and system engineering from Czech Technical University, Prague, Czech Republic, in 2007.

He is currently the Head of Division of Automatic Control and Engineering Informatics in the Department of Instrumentation and Control Engineering within the Faculty of Mechanical Engineering, Czech Technical University. He was a Visiting Researcher at the University of Saskatchewan, Saskatoon, SK, Canada, in 2003. His thesis on nonconventional neural units and adaptive approach to evaluation of complicated dynamical systems was recognized by the Verner von Siemens Excellence Award 2007. For six months in 2009, he worked on neural networks and biomedical applications at the Cyberscience Center, Tohoku University, Miyagi, Japan. He held a short assignment at the University of Manitoba, Winnipeg, MB, Canada, in 2010. His current research interests include multiscale analyzes for adaptive evaluation of complicated dynamical systems and neural networks.

Dr. Bukovsky has been a member of IEEE Computational Intelligence Society (CIS) Neural Network Technical Committee since 2007, and the Chair of CIS Neural Networks Technical Committee Task Force on Education since 2009. He became involved in IEEE CIS Student Activity Subcommittee in 2010.

Tianping Chen received the Postgraduate degree from the Mathematics Department, Fudan University, Shanghai, China, in 1965.

He is currently a Professor in the School of Mathematical Sciences, Fudan University. His current research interests include complex networks, neural networks, principal component analysis, independent component analysis, dynamical system harmonic analysis, and approximation theory.

Prof. Chen was a recipient of several awards, including the second prize of National Natural Science Award of China in 2002, the Outstanding Paper award of the IEEE TRANSACTIONS ON NEURAL NETWORKS in 1997, and the Best Paper Award of the Japanese Neural Network Society in 1997.

Tom Heskes received the Ph.D. degree in physics from Radboud University, Nijmegen, Netherlands, in 1993.

He was a Post-Doctoral Fellow at the Beckman Institute, University of Illinois at Urbana-Champaign, Urbana. He is currently a Professor of artificial intelligence and computer science in Radboud University. He leads the Machine Learning Group and is Principal Investigator and Director of the Institute for Computing and Information Sciences. He is also the Principal Investigator at the Donders Center for Neuroscience, Radboud University. He has published over 100 research papers and books in the following areas. His current research interests include (Bayesian) machine learning and probabilistic graphical models, with applications to cognitive neuroimaging and bioinformatics.

Prof. Heskes received the prestigious National Grant (Vici) for the research on probabilistic artificial intelligence, in 2006. He is the Editor-in-Chief of Neurocomputing and Associate Editor of several other journals. He has served on program committees of dozens of international conferences.

Kazushi Ikeda (M'94–SM'07) received the B.E., M.E., and Ph.D. degrees in mathematical engineering and information physics from the University of Tokyo, Tokyo, Japan, in 1989, 1991, and 1994, respectively.

He joined the Department of Electrical and Computer Engineering, Kanazawa University, Kanazawa, Japan, and moved to the Department of Systems Science, Kyoto University, Kyoto, Japan, as an Associate Professor, in 1998. Since 2008, he has been a Professor in the Graduate School of Information Science, Nara Institute of Science and Technology, Ikoma, Japan. His current research interests include machine learning theory such as support vector machines and information geometry, applications to adaptive systems, and brain informatics.

Dr. Ikeda is currently the Editor-in-Chief of Journal of Japanese Neural Network Society, an Action Editor of Neural Networks, and an Associate Editor of Institute of Electronics, Information and Communication Engineers Transactions on Information and Systems. He has served as a member of the Board of Governors of Japanese Neural Network Society and Institute of Systems, Control and Information Engineers.

Fakhri Karray (SM'89–M'90–SM'99) received the Ph.D. degree from the University of Illinois at Urbana-Champaign, Urbana, in 1989.

He is a Professor in the Department of Electrical and Computer Engineering, University of Waterloo, Waterloo, ON, Canada, and the Associate Director of the Pattern Analysis and Machine Intelligence Laboratory, University of Waterloo. He holds 13 U.S. patents in various areas of intelligent systems design using tools of computational intelligence. He is the co-author of the textbook *Tools of Soft Computing and Intelligent Systems Design* (New York, NY: Addison-Wesley, 2004). He has extensively published in the following areas. His current research interests include soft computing and tools of computational intelligence with applications to autonomous systems and intelligent man-machine interaction.

Dr. Karray has served over the years as Associate Editor for the IEEE TRANSACTIONS ON MECHATRONICS, the IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS-PART B, the IEEE COMPUTATIONAL INTELLIGENCE MAGAZINE, the International Journal of Robotics and Automation, the International Journal of Control and Intelligent Systems, and the International Journal of Image Processing. He has been a Guest Editor for the IEEE TRANSACTIONS ON MECHATRONICS and the JOURNAL OF CONTROL AND INTELLIGENT SYSTEMS. He was the recipient of a number of professional and scholarly awards and has served as Chair/Co-Chair for more than 12 international conferences and technical programs. He is the founding General Co-Chair of the International Conference on Autonomous and Intelligent Systems and the founding Co-Chair of the IEEE Computational Intelligence Society, Kitchener-Waterloo Chapter, and Chair of the IEEE Control Systems Society of the same chapter.

Rhee Man Kil (M'94–SM'09) received the Ph.D. degree in computer engineering from the University of Southern California, Los Angeles, in 1991.

He joined the Basic Research Department of Electronics and Telecommunications Research Institute, Daejeon, Korea. Since 1994, he has been with the Korea Advanced Institute of Science and Technology (KAIST), Daejeon, where he is currently an Associate Professor in the Department of Mathematical Sciences. In the KAIST, he has been working as an Operating Committee member of the Brain Science Research Center funded by the Korean Ministry of Science and Technology. His current research interests include theories and applications of machine learning, pattern classification, model selection in regression problems, active learning, text mining, financial data mining, noise-robust speech feature extraction, and binaural information processing.

He served as a Guest Editor for neural information processing journals and also served as a program committee member for several international conferences related to neural networks.

Robert Legenstein received the Ph.D. degree in telematics from Graz University of Technology (TUG), Graz, Austria, in 2002.

He is currently an Assistant Professor in the Department of Computer Science, TUG. He is also the Deputy Head of the Institute for Theoretical Computer Science, TUG. He is especially interested in biologically inspired neural computation. Currently, he is coordinating the international research project "Novel Brain-Inspired Learning Paradigms for Large-Scale Neuronal Networks" of the European Commission. His current research interests include neural networks, learning in neural systems, reward-based learning, spiking neural networks, information processing in biological neural systems, and dynamics in neural networks.

Dr. Legenstein has been honored as an outstanding reviewer at the 2008 conference on Advances in Neural Information Processing Systems.

Jinhu Lu (M'03–SM'06) received the Ph.D. degree in applied mathematics from the Academy of Mathematics and Systems Science (AMSS), Chinese Academy of Sciences (CAS), Beijing, China, in 2002.

He is an Associate Professor of AMSS, CAS, and also a Professor and Australian Research Council (ARC) Future Fellow with the School of Electrical and Computer Engineering, Royal Melbourne Institute of Technology University, Melbourne, Australia. He has held several visiting positions in Australia, Canada, France, Germany, and Hong Kong, and was a Visiting Fellow in Princeton University, Princeton, NJ, from 2005 to 2006. His current research interests include nonlinear circuits and systems, neural networks, complex systems, and networks.

Dr. Lu is an Associate Editor of the IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS I AND II. He is the Secretary of the Technical Committee of Neural Systems and Applications of the IEEE Circuits and Systems Society. He has received several prestigious awards, including National Science Fund for Distinguished Young Scholars in China, the Hundred Talents Program of CAS, the National Natural Science Award from the Chinese Government, the Natural Science Award of the Ministry of Education of China, and the ARC Future Fellowships Award in Australia.

Yunqian Ma (SM'07) received the Ph.D. degree in electrical engineering from the University of Minnesota, Minneapolis, in 2003.

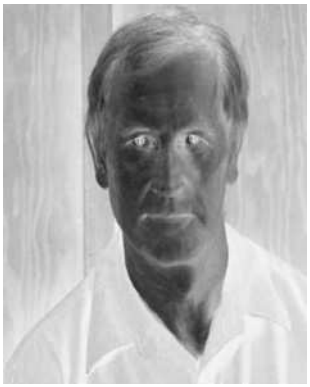
He joined Honeywell International Inc., Morristown, NJ, where he is currently a Senior Principal Research Scientist, Advanced Technology Laboratory, Honeywell Aerospace. He holds 10 U.S. patents and 35 patent applications. He has authored 50 publications, including two books. His research has been supported by internal funds and external contracts, such as the Defense Advanced Research Projects Agency, Homeland Security Advanced Research Projects Agency, and Federal Aviation Administration. His current research interests include inertial navigation, integrated navigation, surveillance, signal and image processing, pattern recognition, computer vision, machine learning, and neural networks.

Dr. Ma received the International Neural Network Society Young Investigator Award for outstanding contributions in the application of neural networks in 2006. He is currently on the Editorial Board of Pattern Recognition Letters, and has served on program committees of several international conferences. He also served on the panel of National Science Foundation in the Division of Information and Intelligent Systems. He is included in the Marquis Who is Who in Engineering and Science.

Malik Magdon-Ismail received the B.S. degree in physics from Yale University in 1993, the Masters degree in physics in 1995, and the Ph.D. degree in electrical engineering with a minor in physics from the California Institute of Technology, Pasadena, in 1998.

He is currently an Associate Professor of Computer Science at Rensselaer Polytechnic Institute (RPI), Tory, NY, where he is a member of the Theory Group. His current research interests include the theory and applications of machine learning, social network algorithms, communication networks, computational finance, and theoretical and algorithmic aspects of learning from data.

Dr. Ismail has served on the program committees of several conferences, and was an Associate Editor for *Neurocomputing*. He has several publications in peer-reviewed journals and conferences, has been a Financial Consultant, has collaborated with a number of companies, and has several active grants from National Science Foundation and other government funding agencies. He has been awarded the RPI Early Career Award in recognition of research.



Mike Paulin received the B.Sc. (hons.) degree in mathematics from the University of Otago, Dunedin, New Zealand, in 1979, and the Ph.D. degree from the University of Auckland, Auckland, New Zealand, in 1985.

He carried out post-doctoral research in experimental and computational neuroscience at the University of Southern California, Los Angeles, and at the California Institute of Technology, Pasadena. He has been a Scientific Programmer and a Lecturer in mathematics at the University of Auckland. For a number of years, he has been a Technical Consultant and Distinguished Visiting Scientist developing biologically inspired algorithms for robotics at NASA-Jet Propulsion Laboratory, Pasadena. He is currently an Associate Professor at the University of Otago. He teaches zoology, neuroscience, mathematics, and computational modeling. His current research interests include principles of neural computation and mechanical design for agility in animals and robots.

Prof. Paulin is a member of the NZ Mathematical Society, the NZ Institute of Mathematics and its Applications, and the IEEE Computational Intelligence Society.

Robi Polikar (M'93–SM'09) received the co-major Ph.D. degree in electrical engineering and biomedical engineering from Iowa State University, Ames, in 2000.

He is currently an Associate Professor with the Department of Electrical and Computer Engineering at Rowan University, Glassboro, NJ, where he directs the Signal Processing and Pattern Recognition Laboratory. He is also a long-term Visiting Scholar at the School of Biomedical Engineering, Science and Health Systems, Drexel University, Philadelphia, PA. His work in following areas has been supported primarily by National Science Foundation's CAREER, Power, Control, and Adaptive Networks and Collaborative Research in Computational Neuroscience programs, and various industrial partners. He is the author of over 120 publications. His current research interests include machine learning, pattern recognition, neural networks, with specific emphasis on incremental learning, nonstationary learning, concept drift, data fusion, and applications of computational intelligence in neuroscience.

Dr. Polikar is a member of the IEEE Computational Intelligence Society, and its Technical Committee on neural networks. He was the recipient of Rowan University's Research Excellence and Achievement Award.

Danil Prokhorov (SM'02) began his technical career in St. Petersburg, Russia, in 1992.

He was a Research Engineer in the St. Petersburg Institute for Informatics and Automation of the Russian Academy of Sciences, Moscow, Russia. He became involved in automotive research in 1995, when he was a summer intern at Ford Scientific Research Laboratory, Dearborn, MI. In 1997, he became a Ford Research Staff Member involved in application-driven research on neural networks and other machine learning methods. While at Ford, he took active part in several production-bound projects including neural-network-based engine misfire detection. Since 2005, he has been with Toyota Technical Center, Ann Arbor, MI, overseeing important mid- and long-term research projects in computational intelligence. He has published more than 100 papers in various journals and conference proceedings, and has several inventions to his credit.

Dr. Prokhorov is a frequent member of Program Committees of various international conferences including the International Joint Conference on Neural Networks and the World Congress on Computational Intelligence, a member of several IEEE technical committees and journal editorial boards.

Marco Wiering received the Ph.D. degree from the University of Amsterdam, Amsterdam, Netherlands, in 1999, after completing the Ph.D. degree program at the Istituto Dalle Molle di Studi sull'Intelligenza Artificiale, Lugano, Switzerland.

He worked as the Assistant Professor in the Intelligent Systems Group, Utrecht University, Utrecht, Netherlands, from 2000 to 2007. He is currently pursuing a tenure track for Full Professor in the Department of Artificial Intelligence, University of Groningen, Groningen, Netherlands. He is also the Director of the Robotlab in the Department of Artificial intelligence. He has published more than 70 peer-reviewed conference and journal papers and has supervised or supervises seven Ph.D. students. Furthermore, he has supervised more than 70 master graduation projects on many different topics. Together with Dr. Martijn van Otterlo, he is editing the book *Reinforcement learning: State-of-the-art*, which will be published in 2011. His current research interests include reinforcement learning, neural networks, robotics, computer games, computer vision, and signal processing.

Dr. Wiering was the Chair of the IEEE Computational Intelligence Society Technical Committee on Adaptive Dynamic Programming and Reinforcement Learning in 2010.

Vicente Zarzoso (S'94–M'03–SM'10) received the Graduate degree with highest distinction in telecommunications engineering from the Polytechnic University of Valencia, Valencia, Spain, in 1996. After starting the Ph.D. degree program at the University of Strathclyde, Glasgow, U.K., he received the Ph.D. degree from the University of Liverpool, Liverpool, U.K, in 1999.

He obtained the Habilitation to Lead Researches from the University of Nice Sophia Antipolis, Nice, France, in 2009. From 2000 to 2005, he held a Research Fellowship from the Royal Academy of Engineering of the U.K. Since 2005, he has been with the Computer Science, Signals and Systems Laboratory of Sophia Antipolis, University of Nice Sophia Antipolis, where he was appointed as a Professor in 2010. He has authored nearly 100 publications on these topics. His current research interests include statistical signal and array processing, with emphasis on independent component analysis, signal separation and their application to biomedical problems and communications.

Dr. Zarzoso has served as Program Committee Member for several international conferences and was a Program Committee Chair of the 9th International Conference on Latent Variable Analysis and Signal Separation in 2010.

Signature Neural Networks: Definition and Application to Multidimensional Sorting Problems

Roberto Latorre, Francisco de Borja Rodríguez, and Pablo Varona

***Abstract*—In this paper we present a self-organizing neural network paradigm that is able to discriminate information locally using a strategy for information coding and processing inspired in recent findings in living neural systems. The proposed neural network uses: 1) neural signatures to identify each unit in the network; 2) local discrimination of input information during the processing; and 3) a multicoding mechanism for information propagation regarding the *who* and the *what* of the information. The local discrimination implies a distinct processing as a function of the neural signature recognition and a local transient memory. In the context of artificial neural networks none of these mechanisms has been analyzed in detail, and our goal is to demonstrate that they can be used to efficiently solve some specific problems. To illustrate the proposed paradigm, we apply it to the problem of multidimensional sorting, which can take advantage of the local information discrimination. In particular, we compare the results of this new approach with traditional methods to solve jigsaw puzzles and we analyze the situations where the new paradigm improves the performance.**

***Index Terms*—Jigsaw puzzles, local contextualization, local discrimination, multicoding, neural signatures, self-organization.**

I. Introduction

RECENT experiments in living neural circuits known as central pattern generators (CPG) show that some individual cells have neural signatures that consist of neuron specific spike timings in their bursting activity [33], [34]. Model simulations indicate that neural signatures that identify each cell can play a functional role in the activity of CPG circuits [22]–[24]. Neural signatures coexist with the information encoded in the slow wave rhythm of the CPG. Readers of the signal emitted by the CPG can take advantage of these multiple simultaneous codes and process them one by one, or simultaneously in order to perform different tasks [23]. The who and the what of the signals can be used to *discriminate* the information received by a neuron by distinctly processing the input as a function of these multiple codes. These results emphasize the importance of cell diversity for some living neural networks and suggest that local discrimination is important in systems where neural signatures are present. This kind of information processing can be a powerful strategy for neural systems to enhance their capacity and performance.

Artificial neural networks (ANNs) are inspired to some extent from their biological counterparts. However, in the context of artificial neural computation, phenomena such as local recognition, discrimination of input signals and multicoding strategies have not been analyzed in detail. Most traditional ANN paradigms consider network elements as indistinguishable units, with the same transfer functions, and without mechanisms of transient memory in each cell. None of the existing ANN paradigms discriminates information as a function of the recognition of the emitter unit. While neuron uniformity facilitates the mathematical formalism of classical paradigms [1], [3], [13], [17], [36] (which has largely contributed to their success [39]), some specific problems could benefit from other approaches.

Here, we propose a neural network paradigm that makes use of neural signatures to identify each unit of the network, and multiple simultaneous codes to discriminate the information received by a cell. The network self-organization is based on the signature recognition and on a distinct processing of input information as a function of a local transient memory in each cell that we have called the local informational context of the unit. The efficiency of the network depends on a trade-off between the advantages provided by the local information discrimination and its computational cost.

In this paper we discuss the application of signature neural networks (SNNs) to solve multidimensional sorting problems. In particular, to fully illustrate the use of this neural network and to evaluate its performance, we apply this formalism to the task of solving canonical jigsaw puzzles.

The paper is organized as follows. In Section II we present the general formalization of the proposed paradigm. In Section III, we: 1) discuss its application to generic multidimensional sorting, and 2) provide an implementation for this kind of problems. To test the performance, in Section IV we: 1) review the jigsaw puzzle problem and the traditional algorithms to solve it; 2) provide a specific solution using a SNN; 3) describe the methods to evaluate the performance; and 4) we present our quantitative results on the comparison of this new approach with traditional methods to solve jigsaw puzzles and we analyze the situations where the new paradigm improves the performance (Section IV-H). Finally, in the Appendix, we illustrate in detail the evolution of the network with another example of multidimensional sorting.

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Color versions of one or more of the figures in this paper are available online at http://ieeexplore.ieee.org.

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IEEE Transactions on Neural Networks and Learning Systems publishes special issues on emerging topics guest edited by distinguished researchers in neural networks and learning systems. Here is some information about how a special issue is organized. Phase 1 â€“ Proposal: Interested researchers should submit a proposal for the special issue on an emerging topic in neural networks and learning systems or its closely related areas. The proposal should be sent to the Editor-in-Chief (EiC).Â The special issue would be organized based on an open call for paper and we do not consider special issues based on papers from a conference. Phase 2 â€“ Evaluation: The EiC gets the proposal evaluated by several associate editors of TNNLS.