IEEE CIRCUITS AND SYSTEMS SOCIETY

TECHNICAL COMMITTEE ON CELLULAR NANOSCALE NETWORKS AND ARRAY COMPUTING (CNNAC)

ANNUAL REPORT 2017

EMBERS			
A Akio Ushida	E Eduardo Gomez	Leon O. Chua	👩 Arena, Paolo
Akos Zarandy	Fernando Corinto	Luigi Fortuna	👰 Pier Paolo Civalleri
Dr. Alon Ascoli	Georgios Ch. Sirakoulis	Maciej Ogorzalek	Piotr Dudek
Angel Rodriguez-Vazquez	Gert Cauwenberghs	Mamoru Tanaka	Ricardo Carmona Galá
Angela Slavova	Horvath Andras	Marco Gilli	Ronald Tetzlaff
Ari Paasio	Hyongsuk Kim	mattia.frasca@diee	Sabri Arik
Arpad Csurgay	Johan Suykens	Mauro Di Marco	Szolgay Peter
Bertram Shi	Joos Vandewalle	Michael Niemier	Valeri Mladenov
💮 Chai Wah Wu	Jordi Albo-Canals		
C Chin-Teng Lin	Jorge Fernández Berni	Mika Laiho	Vedat Tavşanoğlu
🕤 Chung-Yu Wu	Josef Nossek	Müştak Yalçın	Victor M.Brea Sánchez
Csaba Rekeczky	Kristof Karacs	Nagy Zoltan	🚱 Wolfgang Porod
David Lopez Vilarino	Lambert Spaanenburg	Nerhun Yildiz	Xavier Vilasis Cardona

Chair : Mustak E. Yalcin

Chair-elect :Fernando Corinto

RENEWAL OF OFFICERS

Chair : Dr. Fernando Corinto(May 2017 – May 2019)

Associate Professor Politecnico di Torino Department of Electronics and Telecommunications Corso Duca degli Abruzzi, 24 - 10129 Torino (Italy) phone +390110904199 fax +390110904171 email <u>fernando.corinto@polito.it</u>

Personal Web Page : <u>http://personal.delen.polito.it/fernando.corinto/Curriculum.html</u> Google Scholar: <u>https://scholar.google.it/citations?user=9qwNrGUAAAAJ&hl=en</u> Researh Gate : <u>https://www.researchgate.net/profile/Fernando_Corinto</u>

Secretary :

Dr. Alon Ascoli

Technische Universität Dresden Toeplerbau, Raum 309 Mommsenstraße 12 01069 Dresden Germany Tel. +49 351 463-33826 Fax +49 351 463-37042 e-mail: <u>alon.ascoli@tu-dresden.de</u>

Research Gate: https://www.researchgate.net/profile/Alon Ascoli

Past Chair :

Dr. Mustak E. Yalcin

Professor

Istanbul Technical University Faculty of Electrical and Electronic Engineering Department of Electronics and Communication Engineering Maslak, 34469, Istanbul, Turkey Tel: 00-90-212-285 36 12 Fax:00-90-212-285 35 65 E-mail: mustak.yalcin@itu.edu.tr

Personal Webpage: <u>http://www2.itu.edu.tr/~yalcinmust</u> Google Scholar: https://scholar.google.be/citations?hl=en&user=tjv7hI4AAAAJ Research Gate : <u>https://www.researchgate.net/profile/Mustak_Yalcin</u>

CONFERENCES/WORKSHOPS WHERE THE MEMBERS OF THE TC WERE ACTIVELY INVOLVED

- The IEEE International Symposium on Circuits and Systems (ISCAS) in Montreal, Canada, from May 22 to 25, 2016.
 - SPECIAL SESSION: "Memristors I", Chair: Ronald Tetzlaff(CNNAC TC Member) and Alon Ascoli(CNNAC TC Member).
 - SPECIAL SESSION: "Memristors II", Chair: Ronald Tetzlaff(CNNAC TC Member) and Alon Ascoli(CNNAC TC Member).
 - SPECIAL SESSION: "Brain Interfaces", Chair: <u>Roland Thewes</u> and Ronald Tetzlaff(<u>CNNAC TC</u> <u>Member</u>).
 - SPECIAL SESSION: "Kirchhoff Paradigm, Wave Digital Filters, and More: A Tribute to Alfred Fettweis I", Chair: J. A. Nossek <u>CNNAC TC Member</u>) and H. C. Reddy
 - SPECIAL SESSION: "Kirchhoff Paradigm, Wave Digital Filters, and More: A Tribute to Alfred Fettweis II", Chair: J. A. Nossek <u>CNNAC TC Member</u>) and H. C. Reddy
- The 15th International Workshop on Cellular Nanoscale Networks and their Applications in Dresden, Germany from August 23 to 25 (https://www.iee.et.tu-dresden.de/cnna2016/)



- CNNAC TC Members in HONORY CHAIR:
 - Leon O. Chua
- CNNAC TC Members in the General Chairs:
 - Ronald Tetzlaff
 - Angela Slavova
- CNNAC TC Members in the Scientific Committee:
 - Paolo Arena
 - Leon O. Chua
 - Fernando Corinto
 - György Csaba
 - Piotr Dudek
 - Peter Földesy
 - Luigi Fortuna
 - Marco Gilli
 - András Horváth
 - Michael Niemier
 - Josef A. Nossek
 - Maciej Ogorzalek
 - Ari Paasio
 - Giovanni E. Pazienza
 - Wolfgang Porod
 - Csaba Rekeczky
 - Ángel Rodríguez-Vázquez

- Bertram Shi
- Péter Szolgay
- Mamoru Tanaka
- Vedat Tavsanoglu
- Ronald Tetzlaff
- Joos Vandewalle
- Xavier Vilasís-Cardona
- Chai Wah Wu
- Mustak E. Yalcin
- Ákos Zarándy
- o Invited speaker: "Nanomagnetic Computing", by Wolfgang Porod (CNNAC TC Member)
- Invited speaker: "Collaborating Smart Lighting Networks", by <u>Csaba Rekeczky</u>, (CNNAC TC <u>Member</u>)
- Invited speaker: "On the Design of Neural Recording Interfaces", by <u>Ángel Rodríguez-Vázquez</u> (<u>CNNAC TC Member</u>)
- The 5th Memristor and Memristive Symposium in Dresden, Germany on August 22, 2016 (https://www.iee.et.tu-dresden.de/cnna2016/wp-content/uploads/2016/08/program_5th-Memristor-and-Memristive-Symposium.pdf)
 - CNNAC TC Members in the Organization Committee:
 - Ronald Tetzlaff
 - Alon Ascoli
 - Invited speaker from our TC:

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- Fernando Corinto, Politecnico di Torino, Italy: "Memristor Circuits: Flux–Charge Analysis Method"
- Ronald Tetzlaff, Technische Universität Dresden, Germany: "The role of initial conditions in memristors"
 - Leon Chua, University of California, Berkeley, USA: "Non-Volatile <-> POP is Flat"
- The VIII IEEE Latin American Symposium on Circuits and Systems (LASCAS) 2017
 - Invited talk: "Why FinFETs, Why 3D ICs are we ready for technology revolution? ", by Maciej Ogorzalek, <u>(CNNAC TC Member) and Malgorzata Chrzanowska-Jeske.</u>
- The International Conference on Modern Circuits and Systems Technologies (MOCAST),12 14 May 2016 / Thessaloniki, Greece
 - CNNAC TC Member in Special Sessions Co-chair:
 - Georgios Sirakoulis
 - CNNAC TC Members in Program Committee:
 - Alon Ascoli
 - Georgios Sirakoulis
 - Mustak Yalcin
- IEEE International Solid-State Circuits Conference (ISSCC 2017), San Francisco , USA Feb 5-9 2016
- CNNAC TC Member in the Program Committee: Gert Cauwenberghs
- VLSI Summer School, IIT Kharagpur, May 27, 2016
 - Invited talk, "Reverse Engineering the Cognitive Brain in Silicon," Gert Cauwenberghs (CNNAC TC Member)
- The International Conference on Distributed Smart Cameras (ICDSC 2016) in Paris, France, September 12-15, 2016.
 - CNNAC TC Member in Technical Program Committee:
 - <u>Víctor Brea,</u>
 - Ricardo Carmona-Galán

- Ángel Rodríguez-Vázquez
- Jorge Fernández-Berni, (CNNAC TC Member)
- Víctor Brea, (CNNAC TC Member)
- Workshop on Architecture of Smart Camera (WASC 2016), Dijon, France, July 4--5, 2016.
 - CNNAC TC Member in Advisory board :<u>Ricardo Carmona-Galán</u>
- ICASSP, 2016, China 20-25 March 2016
 - Plenary Speaker: Johan Suykens <u>(CNNAC TC Member)</u>, "Learning with Primal and Dual Model Representations: A Unifying Picture"
- IEEE Biomedical Circuits and Systems Conference (BioCAS 2016), Shanghai, Oct. 17-19, 2016.
 - CNNAC TC Member in International Liaison Committee: Gert Cauwenberghs
- IEEE Engineering in Medicine and Biology Conference (EMBC 2017);
 - CNNAC TC Member in the Organization Committee: Gert Cauwenberghs
- Global Healthcare Forum, Cambridge MA, March 25 26, 2017.
 - Invited talk, "Silicon Integrated High-Density Neural Interfaces," Gert Cauwenberghs (CNNAC TC Member)
- 5th International Conference from Nanoparticles and Nanomaterials to Nanodevices and Nanosystems (5th IC4N 2016).
 - Invited Speaker: Georgios Sirakoulis
- IRDS NanoCrossbar Workshop, Sunnyvale CA, July 15, 2016
 - Invited talk, "Neuromorphic Silicon Learning Machines," Gert Cauwenberghs (CNNAC TC Member)
- International IEEE EMBS Workshop on Advanced NeuroTechnologies for BRAIN Initiatives (ANTBI), Nov. 10-11, San Diego, 2016.
 - Invited talk : "Silicon Integrated High-Density Neural Interfaces," Gert Cauwenberghs (CNNAC TC Member)
- <u>IEEE Neural Engineering Conference (NER 2017)</u>, Shanghai, China, May 25-28 2017.
 - CNNAC TC Member in Program Committee:Gert Cauwenberghs
- IEEE Symposium Series on Computational Intelligence (IEEE SSCI 2016)
 - CNNAC TC Member in Special Session Co-Chair:Georgios Sirakoulis
- Workshop on Complexity in Engineering, Catania, Italy, July 4-6, 2016
 - CNNAC TC Member in General Chair: Luigi Fortuna
 - CNNAC TC Member in Steering Committee: Mattia Frasca
 - Plenary talk :"Applications of Cellular Automata with Random Memory: Random NumberGenerator and Physical Unclonable Function" by Mustak E. Yalcin (CNNAC TC Member)
- IGERT Neuroengineering Training Program, University of Minnesota, Minneapolis, May 16, 2017.
 - Keynote Speaker: •"Advances in Multiscale Integrated Neural Interfaces," Gert Cauwenberghs (CNNAC TC Member)
- 12th International Conference on Cellular Automata for Research and Industry (ACRI 2016).
 - CNNAC TC Member in Steering Committee:Georgios Sirakoulis
- NSCI Seminar, Boulder CO, April 11, 2017
 - Invited talk . "Neuromorphic Silicon Learning Machines," Gert Cauwenberghs (CNNAC TC Member)
- Frontier Tech Formum: RoboUniverse, San Diego, Dec. 14, 2016.
 - Invited talk, "Reverse Engineering the Cognitive Brain in Silicon," Gert Cauwenberghs (CNNAC TC Member)
- Fujitsu Laboratories of America, Sunnyvale CA, Dec. 5, 2016.

- Invited talk, "Advances in Unobtrusive Brain-Machine-Body Interfaces,"," Gert Cauwenberghs (CNNAC TC Member)
- UCSD-UST Bilateral Symposium, San Diego CA, Nov. 18, 2016
 - Invited talk, "Towards High-Resolution Retinal Neural Interfaces," Gert Cauwenberghs (CNNAC TC Member)

EDITORIAL SERVICE

- The IEEE Circuits and Systems Magazine, IEEE
 - Editor in Chief : Dr. Chai Wah Wu (CNNAC TC Member)
- IEEE Transactions on Circuits and Systems Part II Express Briefs, IEEE
 - Associate Editor :
 - <u>Ronald Tetzlaff (CNNAC TC Member)</u>
 - Piotr Dudek (CNNAC TC Member)
- International Journal of Circuit Theory and Applications, Wiley
 - Editor in Chief : <u>Á. Rodríguez-Vázquez</u>
 - Editors from our TC:
 - Ronald Tetzlaff
 - Fernando Corinto
 - Peter Szolgay
 - M. J. Ogorzalek
 - A. Csurgay
 - Editorial Board Member form our TC:
 - Joos Vandewalle
 - <u>Casaba Rekeczky</u>
- IEEE Transactions on Neural Networks and Learning Systems
 - Associate Editor from our TC : Johan Suykens
- IEEE Transactions on Biomedical Circuits and Systems
 - o <u>Editorial Board Member form our TC:</u>, Gert Cauwenberghs
- o IEEE Transactions on Biomedical Engineerings
 - o Editorial Board Member form our TC: , Gert Cauwenberghs
- o Microelectronics Journal, Elsevier

- Associate Editor from our TC : Georgios Sirakoulis
- Integration, the VLSI Journal, Elsevier
 - Associate Editor from our TC : Georgios Sirakoulis
- o Journal of Real-Time Image Processing, Springer
 - Associate Editor : <u>Ricardo Carmona-Galán (CNNAC TC Member)</u>
- o Journal of Applied Matehematics, Hindawi
 - Associate Editor from our TC : Georgios Sirakoulis
- International Journal of Bifurcation and Chaos (IJBC), World Scientific
 - Honorary Editor-in-Chief : Leon Chua
 - Associate Editors :
 - Mustak E. Yalcin
 - Mattia Frasca
 - Honorary Editorial Board Members form our TC:
 - Marco Gilli
 - M. J. Ogorzalek
 - Luigi Fortuna
- SpringerBriefs in Nonlinear Circuits, Springer
 - Editors: Fortuna, Luigi,

- Members of the Editorial Board:Mattia Frasca, Ronald Tetzlaff; Mustak E. Yalcin
- Journal of Cellular Automata, Old City Publishing House.
 - Associate Editor from our TC : Georgios Sirakoulis
 - International Journal of Unconventional Computing, Old City Publishing House
 - Associate Editor from our TC : Georgios Sirakoulis
- o International Journal of Parallel, Emergent and Distributed Systems, Taylor and Francis
 - Associate Editor from our TC : Georgios Sirakoulis
- o Parallel Processing Letters, World Scientific
 - Associate Editor from our TC : Georgios Sirakoulis
- Recent Advances on Electrical & Electronic Engineering, Bentham
 - Associate Editor from our TC : Georgios Sirakoulis
- Frontiers in Neuromorphic Engineering
 - Editorial Board Member form our TC: , Gert Cauwenberghs
 - IEEE Nanotechnology Express (ENANO), IEEE
 - Editor-in-Chief : <u>Wolfgang Porod (CNNAC TC Member)</u>
- o International Journal of Neural Networks and Applications, Serials
 - Editor in Chief :<u>Angela Slavova (CNNAC TC Member)</u>
- Pliska Studia Mathematica Bulgarica , <u>Bulgarian Academy of Sciences</u>.
 Guest Chief :*Angela Slavova* (CNNAC TC Member)
- o Chaos, Solitons and Fractals.
 - o Editor: Mattia Frasca (CNNAC TC Member)
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PUBLICATIONS OF THE MEMBERS

Member'spublication list can beaccess by Google Scholar link.For the period of annual report, the number of publication are given in this report. Furthermore, the most related publication of each member are given.

Zarandy, Akos -(11 journal and Conf. pub) - Google Scholar

A real-time multi-camera vision system for UAV collision warning and navigation Á Zarándy, M Nemeth, Z Nagy, A Kiss, L Santha, T Zsedrovits Journal of Real-Time Image Processing 12 (4), 709-724 Alon, Ascoli-(11 journal and Conf. pub.) The First Ever Real Bistable Memristors—Part II: Design and Analysis of a Local Fading Memory System Alon Ascoli; Ronald Tetzlaff, Leon O. Chua IEEE Transactions on Circuits and Systems II: Express Briefs (Volume: 63, Issue: 12, Dec. 2016) Rodriguez-Vazquez, Angel-(28 journal and Conf. pub) - Google Scholar Mixed-signal guadratic operators for the feature extraction of neural signals M Delgado-Restituto, R Fiorelli, M Carrasco-Robles, ... Biomedical Circuits and Systems Conference (BioCAS), 2016 IEEE, 368-371 Slavova, Angela -(2 Conf. pub) Local Activity in Reaction-Diffusion CNN with Memristor Synapses Angela Slavova; Galina Bobeva CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications Paasio, Ari -(5 journal and Conf. pub) -Google Scholar Ultra low-power array processor propagation circuit arrangement A Paasio Circuits and Systems (ISCAS), 2016 IEEE International Symposium on, 2515-2518 Shi, Bertram -(13 journal and Conf. pub)- Google Scholar A two layer disparity selective simple cell model S Cheng, Q Peng, BE Shi

	Neural Networks (IJCNN), 2016 International Joint Conference on, 4759-4766
Wu, Chai Wah -(1	11 journal and Conf. pub) - <u>Google Scholar</u>
	Control localization in networks of dynamical systems connected via a weighted tree
	R Bapat, CW Wu
	IEEE Transactions on Systems, Man, and Cybernetics: Systems
Rekeczky, Csaba	-(1 Conf. pub) <u>- Google Scholar</u>
	Cellular Vision Based ADAS Applications
	A Horvath, I Horvath, A Kiss, D Huszar, A Palffy, L Kovacs, D Babicz,
	CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their
	Applications
Vilariño, David L.	(1 journal pub.)
	PRECISION: A Reconfigurable SIMD/MIMD Coprocessor for Computer Vision Systems-on-Chip
	Alejandro Nieto; David L. Vilariño; Victor M. Brea
	IEEE Transactions on Computers
	Year: 2016, Volume: 65, Issue: 8
Corinto, Fernand	o -(12 journal and Conf. pub)- <u>Google Scholar</u>
	Memristors-Devices, Models, Circuits, Systems and Applications
	R Tetzlaff, F Corinto, R Picos, M Ogorzalek
	International Journal of Circuit Theory and Applications 44 (7), 1478-1479
Georgios Ch. Sira	koulis -(52 journal and Conf. pub)- <u>Google Scholar</u>
	Emerging Memristor-Based Logic Circuit Design Approaches: A Review
	I Vourkas, GC Sirakoulis
	IEEE Circuits and Systems Magazine 16 (3), 15-30
Cauwenberghs, G	Gert -(26 journal and Conf. pub, 2 Patents)- Google Scholar
	Silicon-Integrated High-Density Electrocortical Interfaces
	S Ha, A Akinin, J Park, C Kim, H Wang, C Maier, PP Mercier,
	Proceedings of the IEEE 105 (1), 11-33
András Horváth-	(3 journal and Conf. pub)- <u>Google Scholar</u> -
	Cellular Vision Based ADAS Applications
	A Horvath, I Horvath, A Kiss, D Huszar, A Palffy, L Kovacs, D Babicz,
King Theorem and /1	CNNA 2016
Kim, Hyongsuk (1	
	Construction of CNN Template via Learning with Random Weight Change Algorithm
	Shyam P. Adhikari; Changju Yang; Hyongsuk Kim; Leon O. Chua
	CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their
Cuuluana Jahan	Applications
Suykens, Jonan -	(43 journal and Conf. pub)- <u>Google Scholar</u>
	Robust gradient learning with applications Y Feng, Y Yang, JAK Suykens
	IEEE transactions on neural networks and learning systems 27 (4), 822-835
Vandawalle Ioo	s -(7 journal and Conf. pub)- Google Scholar
vandawane, joos	A short history of circuits and systems
	J Vandewalle
	River Publishers
Berni. Jorge Fern	ández -(13 journal and Conf. pub, 2 patents)- <u>Google Scholar</u> -
	Focal-Plane Scale Space Generation with a 6T Pixel Architecture
	FDV Oliveira, JGRC Gomes, R Carmona-Galán, J Fernández-Berni,
	Electronic Imaging 2016 (12), 1-8
Nossek, Josef - (21	L journal and Conf. pub)-
	Minimum BER precoding in 1-Bit massive MIMO systems
	Hela Jedda; Josef A. Nossek; Amine Mezghani
	2016 IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM)
Karacs, Kristof	, 6 6
,	Saliency based Attention Mechanism for Topographic Architectures
	Mihaly Radvanyi; Kristof Karacs
	CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their
	Applications
Spaanenburg. La	mbert -(2 journal and Conf. pub)- <u>Google Scholar</u>

	Networked Neural Systems
	L Spaanenburg, WJ Jansen
	CHIPS 2020 VOL. 2, 231-242
Chua, Leon -(12 j	ournal and Conf. pub)-
	The First Ever Real Bistable Memristors—Part II: Design and Analysis of a Local Fading
	Memory System
	Alon Ascoli; Ronald Tetzlaff; Leon O. Chua
	IEEE Transactions on Circuits and Systems II: Express Briefs
Fortuna, Luigi-(20	6 journal and Conf. pub)- <u>Google Scholar</u>
	Turing patterns in memristive cellular nonlinear networks
	A Buscarino, C Corradino, L Fortuna, M Frasca, LO Chua
	IEEE Transactions on Circuits and Systems I: Regular Papers 63 (8), 1222-1230
Ogorzalek, Macie	ej-(7 journal and Conf. pub)- <u>Google Scholar</u> -
	Memristors-Devices, Models, Circuits, Systems and Applications
	R Tetzlaff, F Corinto, R Picos, M Ogorzalek
	International Journal of Circuit Theory and Applications 44 (7), 1478-1479
Frasca, Mattia -(2	22 journal and Conf. pub)- <u>Google Scholar</u> -
	Turing patterns in memristive cellular nonlinear networks
	A Buscarino, C Corradino, L Fortuna, M Frasca, LO Chua
	IEEE Transactions on Circuits and Systems I: Regular Papers 63 (8), 1222-1230
Di Marco, Mauro	o-(6 journal and Conf. pub)- <u>Google Scholar</u>
	Complete stability of feedback CNNs with dynamic memristors and second-order cells
	M Di Marco, M Forti, L Pancioni
	International Journal of Circuit Theory and Applications 44 (11), 1959-1981
Niemier, Michae	I -(14 journal and Conf. pub) - <u>Google Scholar</u>
	Molecular cellular networks: A non von Neumann architecture for molecular
	electronics
	CS Lent, KW Henderson, SA Kandel, SA Corcelli, GL Snider, AO Orlov,
	Rebooting Computing (ICRC), IEEE International Conference on, 1-7
Laiho, Mika(19	journal and Conf. pub)
	Large-Scale Memristive Associative Memories
	Eero Lehtonen; Jussi H. Poikonen; Mika Laiho; Pentti Kanerva
	IEEE Transactions on Very Large Scale Integration (VLSI) Systems
	Year: 2014, Volume: 22, Issue: 3
Yalçın, Müştak E.	(2 Conf. pub)- <u>Google Scholar</u>
	A New Implementation of Fully Programmable Complete CNN Processor Core on
	FPGA
	V. Meric and ME Yalcin
	CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their
	Applications
Zoltan, Nagy-(5 id	
	ournal and Conf. pub)-
	ournal and Conf. pub)- Accelerating a charged single ?-helix search algorithm in protein sequences using FPGA
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	ournal and Conf. pub)- Accelerating a charged single ?-helix search algorithm in protein sequences using FPGA Zoltan Nagy; Zoltan Gaspari; Akos Kovacs CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications 2 journal and Conf. pub)- <u>Google Scholar</u> On the way to a Third Generation Real-Time Cellular Neural Network Processor
	ournal and Conf. pub)- Accelerating a charged single ?-helix search algorithm in protein sequences using FPGA Zoltan Nagy; Zoltan Gaspari; Akos Kovacs CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications 2 journal and Conf. pub)- <u>Google Scholar</u> <u>On the way to a Third Generation Real-Time Cellular Neural Network Processor</u> N Yildiz, E Cesur, V Tavsanoglu
	ournal and Conf. pub)- Accelerating a charged single ?-helix search algorithm in protein sequences using FPGA Zoltan Nagy; Zoltan Gaspari; Akos Kovacs CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications 2 journal and Conf. pub)- <u>Google Scholar</u> On the way to a Third Generation Real-Time Cellular Neural Network Processor N Yildiz, E Cesur, V Tavsanoglu CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their
Yildiz, Nerhun -(2	Accelerating a charged single ?-helix search algorithm in protein sequences using FPGA Zoltan Nagy; Zoltan Gaspari; Akos Kovacs CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications 2 journal and Conf. pub)- <u>Google Scholar</u> On the way to a Third Generation Real-Time Cellular Neural Network Processor N Yildiz, E Cesur, V Tavsanoglu CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications
Yildiz, Nerhun -(2	 ournal and Conf. pub)- Accelerating a charged single ?-helix search algorithm in protein sequences using FPGA Zoltan Nagy; Zoltan Gaspari; Akos Kovacs CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications 2 journal and Conf. pub)- Google Scholar On the way to a Third Generation Real-Time Cellular Neural Network Processor N Yildiz, E Cesur, V Tavsanoglu CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications journal and Conf. pub.) – Google Scholar-
Yildiz, Nerhun -(2	 Accelerating a charged single ?-helix search algorithm in protein sequences using FPGA Zoltan Nagy; Zoltan Gaspari; Akos Kovacs CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications 2 journal and Conf. pub)- <u>Google Scholar</u> On the way to a Third Generation Real-Time Cellular Neural Network Processor N Yildiz, E Cesur, V Tavsanoglu CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications 2 journal and Conf. pub)- <u>Google Scholar</u> On the way to a Third Generation Real-Time Cellular Neural Network Processor N Yildiz, E Cesur, V Tavsanoglu CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications journal and Conf. pub.) – <u>Google Scholar</u>- A Fly-Inspired Mushroom Bodies Model for Sensory-Motor Control Through Sequence
Yildiz, Nerhun -(2	ournal and Conf. pub)- Accelerating a charged single ?-helix search algorithm in protein sequences using FPGA Zoltan Nagy; Zoltan Gaspari; Akos Kovacs CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications 2 journal and Conf. pub)- <u>Google Scholar</u> On the way to a Third Generation Real-Time Cellular Neural Network Processor N Yildiz, E Cesur, V Tavsanoglu CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications journal and Conf. pub.) – <u>Google Scholar</u> - <u>A Fly-Inspired Mushroom Bodies Model for Sensory-Motor Control Through Sequence and Subsequence Learning</u>
Yildiz, Nerhun -(2	ournal and Conf. pub)- Accelerating a charged single ?-helix search algorithm in protein sequences using FPGA Zoltan Nagy; Zoltan Gaspari; Akos Kovacs CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications 2 journal and Conf. pub)- <u>Google Scholar</u> On the way to a Third Generation Real-Time Cellular Neural Network Processor N Yildiz, E Cesur, V Tavsanoglu CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications journal and Conf. pub.) – <u>Google Scholar</u> - A Fly-Inspired Mushroom Bodies Model for Sensory-Motor Control Through Sequence and Subsequence Learning P Arena, M Calí, L Patané, A Portera, R Strauss
Yildiz, Nerhun -(2 Arena, Paolo -(3	 Accelerating a charged single ?-helix search algorithm in protein sequences using FPGA Zoltan Nagy; Zoltan Gaspari; Akos Kovacs CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications 2 journal and Conf. pub)- <u>Google Scholar</u> On the way to a Third Generation Real-Time Cellular Neural Network Processor N Yildiz, E Cesur, V Tavsanoglu CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications 2 journal and Conf. pub)- <u>Google Scholar</u> On the way to a Third Generation Real-Time Cellular Neural Network Processor N Yildiz, E Cesur, V Tavsanoglu CNNA 2016; 15th International Workshop on Cellular Nanoscale Networks and their Applications journal and Conf. pub.) – <u>Google Scholar</u>- A Fly-Inspired Mushroom Bodies Model for Sensory-Motor Control Through Sequence and Subsequence Learning P Arena, M Calí, L Patané, A Portera, R Strauss International Journal of Neural Systems 26 (06), 1650035
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NOMINATIONS

The CNNAC TC endorsed;

Dr. Fernando Corinto and Dr. Mattia Frasca

ISCAS 2017 Track (8.6 Cellular Nanoscale Networks and Array Computing) Chair: Ricardo Carmona Galán