

Dr. Eng.

# Mihai V. MICEA

Professor

Scientific Secretary of the Department  
Coordinator of the DSPLabs

Polytechnica University of Timisoara  
Faculty of Automation and Computers  
Department of Computer and Software Engineering  
DSPLabs: Digital Signal Processing Laboratories

2, Vasile Parvan Blvd. , 300223, Timisoara, Romania  
Tel/Fax: +40 256 403214  
E-mail: mihai.micea<at>cs.upt.ro  
Webpage: http://dsplabs.cs.upt.ro/~micha



## PUBLICATIONS LIST

### Summary

#### 89 Publications in total:

- 3 Books
- 7 Book Chapters
- 7 Course Notebooks
- 1 Lab Workbooks
- 1 PhD Theses
- 3 PhD Reports
- 26 Journal Papers
- 37 Conference Papers
- 4 Application Notes
- 23 Publications as First Author
- 22 Publications as Single Author
- 62 Citations in total

### Publications: Books (3)

- [Book 3] Mihai V. Micea, "Prelucrarea numerica a semnalelor in domeniul timp", in *Colectia Prelucrarea Semnalelor*, Editura Politehnica, Timisoara, Romania, **2009**, 254 pg., ISBN 978-973-625-927-2.
- [Book 2] Mihai V. Micea, "Proiectarea sistemelor timp-real pentru aplicatii critice", in *Colectia Calculatoare - Informatica*, Editura Orizonturi Universitare, Timisoara, Romania, **2005**, 175 pg., ISBN 973-638-222-2.
- [Book 1] Nicolae Robu, Vasile Stoicu Tivadar, Lacramioara Stoicu Tivadar, Mihai V. Micea, "Internet - infrastructura si servicii", in *Colectia Calculatoare*, Editura Politehnica, Timisoara, Romania, **2002**, 330 pg., ISBN 973-625-013-X.

### Publications: Book Chapters (7)

- [BChp 7]** Mihai Fagadar Cosma, Vladimir I. Cretu, Mihai V. Micea, "Dense and Sparse Optic Flows Aggregation for Accurate Motion Segmentation in Monocular Video Sequences", in *Lecture Notes in Computer Science (LNCS)*, volume 7324, section 25, Aurelio Campilho, Mohamed Kamel (Eds.), Springer Berlin Heidelberg, Aveiro, Portugal, Jun., **2012**, pp. (208 - 215), ISBN 978-3-642-31294-6, ISSN 0302-9743, DOI: 10.1007/978-3-642-31295-3\_25. [Indexed: ISI Web of Science, Thomson Reuters].
- [BChp 6]** Mihai V. Micea, Valentin Stangaciu, Cristina Stangaciu, Constantin Filote, "Sensor-Level Real-Time Support for XBee-Based Wireless Communication", in *Advances in Intelligent and Soft Computing (AISC)*, volume 145, section 20, Ford L. Gaol, Quang V. Nguyen (Eds.), Springer Berlin Heidelberg, Berlin, Germany, Jan., **2012**, pp. (147 - 154), ISBN 978-3-642-28307-9, DOI: 10.1007/978-3-642-28308-6\_20. [Indexed: ISI Web of Science, Thomson Reuters].
- [BChp 5]** Mihai V. Micea, Andrei Stancovici, Sinziana Indreica, "Distance Measurement for Indoor Robotic Collectives", in *Mobile Robots - Control Architectures, Bio-Interfacing, Navigation, Multi Robot Motion Planning and Operator Training*, section 16, Janusz Bedkowski (Eds.), InTech, Rijeka, Croatia, Dec., **2011**, pp. (353 - 372), ISBN 978-953-307-842-7.
- [BChp 4]** Razvan D. Cioarga, Mihai V. Micea, Vladimir I. Cretu, Daniel Racoceanu, "Emergent Behavior Control Patterns in Robotic Collectives", in *Lecture Notes in Artificial Intelligence (LNAI)*, volume 5928, section 16, Ming Xie, Youlun Xiong, Caihua Xiong, Honghai Liu, Zhencheng Hu (Eds.), Springer Berlin Heidelberg, Singapore, Singapore, Dec., **2009**, pp. (165 - 173), ISBN 978-3-642-10816-7, ISSN 0302-9743, DOI: 10.1007/978-3-642-10817-4\_16. [Indexed: ISI Web of Science, Thomson Reuters].

- [BChp 3]** Marius Marcu, Dacian Tudor, Sebastian Fuicu, Mihai V. Micea, Silvia Copil-Crisan, Florin Maticu, "Power Characterization of Multi-Threading Mobile Applications", in *New Aspects of Computers*, volume 2, N. E. Mastorakis, V. Mladenov, Z. Bojkovic, D. Simian, S. Kartalopoulos, A. Varonides, et al. (Eds.), WSEAS Press, Heraklion, Greece, Jul., **2008**, pp. (583 - 588), ISBN 978-960-6766-85-5, ISSN 1790-5109. [Indexed: ISI Web of Science, Thomson Reuters].
- [BChp 2]** Razvan D. Cioarga, Mihai V. Micea, Bogdan Ciubotaru, Vladimir I. Cretu, Dan Chiciudean, "Emergent System for Information Retrieval", in *Artificial Intelligence and Innovations 2007: From Theory to Applications (IFIP Series)*, volume 247, section 44, Christos Boukis, Aristodemos Pnevmatikakis, Lazaros Polymenakos (Eds.), Springer Science and Business Media, Boston, USA, Sep., **2007**, pp. (409 - 417), ISBN 978-0-387-74160-4, DOI: 10.1007/978-3-642-10817-4\_16. [Indexed: Springer Link, Springer Science + Business Media].
- [BChp 1]** Mircea Popa, Anca S. Popa, Vladimir I. Cretu, Mihai V. Micea, "Centralized Management System for Mobile Communications with Pocket PCs", in *Innovations and Advanced Techniques in Computer and Information Sciences and Engineering*, section 58, Tarek Sobh (Eds.), Springer Science and Business Media, Dordrecht, The Netherlands, Jun., **2007**, pp. (327 - 332), ISBN 978-1-4020-6267-4, DOI: 10.1007/978-1-4020-6268-1\_58. [Indexed: ISI Web of Science, Thomson Reuters].

## Publications: Course Notebooks (7)

- [CNbk 7] Mihai V. Micea, "Multimedia Systems: Course Support", 2-nd Edition, Politehnica University of Timisoara, Timisoara, Romania, Sep., **2010**. [Online].
- [CNbk 6] Mihai V. Micea, "Telecomunicatii digitale moderne: Suport de curs", 3-rd Edition, Politehnica University of Timisoara, Timisoara, Romania, Apr., **2008**, 138 pg.. [Print Order 270].
- [CNbk 5] Mihai V. Micea, "Advanced Digital Signal Processing: Course Support", 2-nd Edition, Politehnica University of Timisoara, Timisoara, Romania, May., **2007**. [Online].
- [CNbk 4] Mihai V. Micea, "Introducere in prelucrarea numerica a semnalelor: Suport de curs", 2-nd Edition, Politehnica University of Timisoara, Timisoara, Romania, Oct., **2007**, 174 pg.. [Print Order 350].
- [CNbk 3] Mihai V. Micea, "Telecomunicatii digitale moderne: Suport de curs", 2-nd Edition, Alcatel Romania, Timisoara, Romania, Feb., **2004**, 125 pg..
- [CNbk 2] Mihai V. Micea, "Introducere in prelucrarea numerica a semnalelor: Suport de curs", Politehnica University of Timisoara, Timisoara, Romania, Jul., **2003**, 172 pg.. [Print Order 120].
- [CNbk 1] Mihai V. Micea, "Telecomunicatii digitale moderne: Suport de curs", Alcatel Romania, Timisoara, Romania, Feb., **2002**, 125 pg..

## Publications: Lab Workbooks (1)

- [Labs 1] Mihai V. Micea, "Sisteme de achizitie numerica a datelor: Indrumator de laborator", Politehnica University of Timisoara, Timisoara, Romania, Sep., **2000**, 182 pg.. [Print Order 270]. [**Times cited: 1**].

## Publications: PhD Theses (1)

- [PhDT 1]** Mihai V. Micea, "Proiectarea si implementarea sistemelor timp-real pentru aplicatii critice de achizitie si prelucrare numerica de semnal", Vladimir I. Cretu (sci. advisor), Politehnica University of Timisoara, Department of Computers, Timisoara, Romania, Sep., **2004**, 263 pg..

## Publications: PhD Reports (3)

- [PhDR 3] Mihai V. Micea, "Proiectarea si implementarea sistemelor timp-real stricte pentru aplicatii critice: sistemul HARETICK", PhD. Report, issue 3, Vladimir I. Cretu (sci. advisor), Politehnica University of Timisoara, Department of Computers, Timisoara, Romania, Nov., **2003**, 74 pg..
- [PhDR 2] Mihai V. Micea, "Consideratii referitoare la proiectarea si implementarea sistemelor timp-real stricte pentru aplicatii critice", PhD. Report, issue 2, Vladimir I. Cretu (sci. advisor), Politehnica University of Timisoara, Department of Computers, Timisoara, Romania, Oct., **2003**, 117 pg..
- [PhDR 1] Mihai V. Micea, "Real-Time Data Acquisition and Digital Signal Processing Systems: Present and Prospects", PhD. Report, issue 1, Vladimir I. Cretu (sci. advisor), Politehnica University of Timisoara, Department of Computers, Timisoara, Romania, May., **2002**, 92 pg..

## Publications: Journal Papers (26)

- [Jrn1 26] Mihai Fagadar Cosma, Marwen Nouri, Vladimir I. Cretu, Mihai V. Micea, "A Combined Optical Flow and Graph Cut Approach for Foreground Extraction in Videoconference Applications", *Studies in Informatics and Control*, volume 21, issue 4, F. G. Filip (Eds.), National Institute for Research and Development in Informatics (ICI), Bucharest, Romania, Dec., **2012**, pp. (413 - 422), ISSN 1220-1766. [Online]. [Indexed: ISI Web of Science, Thomson Reuters].
- [Jrn1 25] Teodor Tite, Catalin Mihai, Georgiana Macariu, Valentin Stangaciu, Mihai V. Micea, Valentin Muresan, Brendan Barry, "moviOS: a Real-Time Multiprocessor Operating System for Multimedia Applications", *Scientific Bulletin of the UPT: Transactions on Automatic Control and Computer Science*, volume 57, issue 1, Octavian Prostean (Eds.), Politehnica University of Timisoara, Timisoara, Romania, Mar., **2012**, pp. (41 - 50), ISSN 1224-600X.
- [Jrn1 24] Mihai V. Micea, Lucian Ungurean, Gabriel N. Carstoiu, Voicu Groza, "Online State-of-Health Assessment for Battery Management Systems", *IEEE Transactions on Instrumentation and Measurement*, volume 60, issue 6, IEEE, Jun., **2011**, pp. (1997 - 2006), ISSN 0018-9456, DOI: 10.1109/TIM.2011.2115630. [Indexed: ISI Web of Science, Thomson Reuters]. [Times cited: 10].
- [Jrn1 23] Mihai V. Micea, Gabriel N. Carstoiu, Lucian Ungurean, Dan Chiciudean, Vladimir I. Cretu, Voicu Groza, "PARSECS: A Predictable Data Communication System for Smart Sensors and Hard Real-Time Applications", *IEEE Transactions on Instrumentation and Measurement*, volume 59, issue 11, IEEE, Nov., **2010**, pp. (2968 - 2981), ISSN 0018-9456, DOI: 10.1109/TIM.2010.2046363. [Indexed: ISI Web of Science, Thomson Reuters]. [Times cited: 2].
- [Jrn1 22] Mihai V. Micea, Andrei Stancovici, Dan Chiciudean, Constantin Filote, "Indoor Inter-Robot Distance Measurement in Collaborative Systems", *Advances in Electrical and Computer Engineering*, volume 10, issue 3, Adrian Graur (Eds.), Stefan cel Mare University of Suceava, Romania, Aug., **2010**, pp. (21 - 26), ISSN 1582-7445, DOI: 10.4316/AECE.2010.03004. [Online]. [Indexed: ISI Web of Science, Thomson Reuters].
- [Jrn1 21] Artur M. Kuczapski, Mihai V. Micea, Laurentiu A. Maniu, Vladimir I. Cretu, "Efficient Generation of Near Optimal Initial Populations to Enhance Genetic Algorithms for Job-Shop Scheduling", *Information Technology and Control*, volume 39, issue 1, Rimantas Seinauskas, Dalius Rubliauskas, Laimutis Telksnys (Eds.), Kaunas University of Technology, Kaunas, Lithuania, **2010**, pp. (32 - 37), ISSN 1392-124X. [Online]. [Indexed: ISI Web of Science, Thomson Reuters]. [Times cited: 6].
- [Jrn1 20] Razvan D. Cioarga, Mihai V. Micea, Vladimir I. Cretu, Emil M. Petriu, "Movement in Collaborative Robotic Environments Based on the Fish Shoal Emergent Patterns", *Sensors & Transducers Journal*, volume 5, issue 3, Serghey Y. Yurish, Pierre Payeur, Emil M. Petriu (Eds.), International Frequency Sensor Association (IFSA), **2009**, pp. (18 - 36), ISSN 1726-5479. [Online]. [Indexed: ProQuest Central, ProQuest LLC.].
- [Jrn1 19] Artur M. Kuczapski, Silviu Trebuian, Mihai G. Novac, Mihai V. Micea, Vladimir I. Cretu, "A Scheduling Strategy for Flexible Job Shop Factories with Probabilistic Events, Applicable in Semiconductor Industry", *Scientific Bulletin of the UPT: Transactions on Automatic Control and Computer Science*, volume 53, issue 4, Octavian Prostean (Eds.), Politehnica University of Timisoara, Timisoara, Romania, Dec., **2008**, pp. (225 - 232), ISSN 1224-600X.
- [Jrn1 18] Marius Marcu, Dacian Tudor, Sebastian Fuicu, Silvia Copil-Crisan, Florin Maticu, Mihai V. Micea, "Power Efficiency Study of Multi-threading Applications for Multi-core Mobile Systems", *WSEAS Transactions on Computers*, volume 7, issue 12, World Scientific and Engineering Academy and Society (WSEAS), Wisconsin, USA, Dec., **2008**, pp. (1875 - 1885), ISSN 1109-2750. [Indexed: Compendex, Elsevier, Inc.]. [Times cited: 3].
- [Jrn1 17] Mihai V. Micea, Vladimir I. Cretu, Voicu Groza, "Maximum Predictability in Signal Interactions with HARETICK Kernel", *IEEE Transactions on Instrumentation and Measurement*, volume 55, issue 4, IEEE, Aug., **2006**, pp. (1317 - 1330), ISSN 0018-9456, DOI: 10.1109/TIM.2006.876530. [Indexed: ISI Web of Science, Thomson Reuters]. [Times cited: 2].
- [Jrn1 16] Dan Chiciudean, Mihai V. Micea, Erwin Lovasz, Marius Mateas, Mihai Udrescu-Milosav, "Real-Time Person Tracking Video System", *Scientific Bulletin of the UPT: Transactions on Mechanics*, volume 50, issue 3, Politehnica University of Timisoara, Timisoara, Romania, Oct., **2005**, pp. (9 - 14), ISSN 1224-6077.
- [Jrn1 15] Bogdan Ciubotaru, Mihai V. Micea, "Routing Protocols and Algorithms in Sensor Networks", *Scientific Bulletin of the UPT: Transactions on Automatic Control and Computer Science*, volume 50, issue 2, Stefan Holban (Eds.), Politehnica University of Timisoara, Timisoara, Romania, Jun., **2005**, pp. (25 - 32), ISSN 1224-600X.
- [Jrn1 14] Razvan D. Cioarga, Mihai V. Micea, "Applications of Emergent Behavior Patterns on Intelligent Sensor Networks", *Scientific Bulletin of the UPT: Transactions on Automatic Control and Computer Science*, volume 50, issue 2, Stefan Holban (Eds.), Politehnica University of Timisoara, Timisoara, Romania, Jun., 2005, pp. (15 - 24), ISSN 1224-600X.

- [Jrn1 13] Mihai V. Micea, Vladimir I. Cretu, "Highly Predictable Execution Support for Critical Applications with HARETICK Kernel", *International Journal of Electronics and Communications (AEU)*, volume 59, issue 5, Elsevier GmbH, Jena, Germany, May., **2005**, pp. (278 - 287), ISSN 1434-8411, DOI: 10.1016/j.aeue.2005.05.011. [Indexed: ISI Web of Science, Thomson Reuters].
- [Jrn1 12] Mihai V. Micea, Vladimir I. Cretu, M. L. Patcas, "Program Modeling and Analysis of Real-Time and Embedded Applications", *Scientific Bulletin of the UPT: Transactions on Automatic Control and Computer Science*, volume 49, issue 3, Stefan Holban (Eds.), Politehnica University of Timisoara, Timisoara, Romania, Sep., **2004**, pp. (207 - 212), ISSN 1224-600X. [Times cited: 1].
- [Jrn1 11] Vladimir I. Cretu, Traian Jurca, Mihai V. Micea, Ioana Sora, "Instrumentation and Measurement in Romania", *IEEE Instrumentation and Measurement Magazine*, volume 6, issue 3, IEEE, USA, Sep., **2003**, pp. (41 - 47), ISSN 1094-6969, DOI: 10.1109/MIM.2003.1238344. [Indexed: ISI Web of Science, Thomson Reuters].
- [Jrn1 10] Vladimir I. Cretu, Liviu E. Anon, Mihai V. Micea, Alexandru Baya, Romeo Resiga, Dan Chiciudean, "Applications for Experimental Study of Hydraulic Phenomena in Hydrodynamic Circuits", *Scientific Bulletin of the UPT: Transactions on Automatic Control and Computer Science*, volume 47, issue 2, Stefan Holban (Eds.), Politehnica University of Timisoara, Timisoara, Romania, May., **2002**, pp. (65 - 70), ISSN 1224-600X.
- [Jrn1 9] Mihai V. Micea, Mircea Stratulat, Dan Ardelean, Daniel Aioanei, "Implementing Professional Audio Effects with DSPs", *Scientific Bulletin of the UPT: Transactions on Automatic Control and Computer Science*, volume 46, issue 1, Stefan Holban (Eds.), Politehnica University of Timisoara, Timisoara, Romania, Apr., **2001**, pp. (55 - 60), ISSN 1224-600X. [Times cited: 4].
- [Jrn1 8] Mihai V. Micea, "Interfacing DAQ Systems to Digital Signal Processors", *Scientific Bulletin of the UPT: Transactions on Automatic Control and Computer Science*, volume 45, issue 4, Stefan Holban (Eds.), Politehnica University of Timisoara, Timisoara, Romania, Oct., **2000**, pp. (23 - 28), ISSN 1224-600X. [Times cited: 1].
- [Jrn1 7] Vladimir I. Cretu, Mihai V. Micea, Iurie Guzun, Viaceslav Guzun, "Aquarius-DSP, from Design to Real-life Applications Integration", *Scientific Bulletin of the UPT: Transactions on Automatic Control and Computer Science*, volume 44, issue 2, Stefan Holban (Eds.), Politehnica University of Timisoara, Timisoara, Romania, **1999**, pp. (5 - 16), ISSN 1224-600X.
- [Jrn1 6] Alexandru Baya, Liviu Anton, Victor Ancusa, Mihai V. Micea, "Real Time Data Acquisition System for a Compound Straight Pipe", *Scientific Bulletin of the UPT: Transactions on Mechanics*, volume 44, issue 1, Politehnica University of Timisoara, Timisoara, Romania, **1999**, pp. (41 - 50), ISSN 1224-6077.
- [Jrn1 5] Mihai V. Micea, "Suporturi de stocare pentru multimedia", *PC Report*, volume 7, issue 68, Computer Press Agora, Tg-Mures, Romania, May., **1998**, pp. (39 - 45), ISSN 1220-9856.
- [Jrn1 4] Mihai V. Micea, "Imaginea in sistemele multimedia", *PC Report*, volume 7, issue 67, Computer Press Agora, Tg-Mures, Romania, Apr., **1998**, pp. (31 - 37), ISSN 1220-9856.
- [Jrn1 3] Mihai V. Micea, "Multimedia - sunetul", *PC Report*, volume 7, issue 66, Computer Press Agora, Tg-Mures, Romania, Mar., **1998**, pp. (33 - 38), ISSN 1220-9856.
- [Jrn1 2] Mihai V. Micea, "Monitorul", *PC Report*, volume 6, issue 62, Computer Press Agora, Tg-Mures, Romania, Nov., **1997**, pp. (41 - 46), ISSN 1220-9856.
- [Jrn1 1] Mihai V. Micea, "Placa video", *PC Report*, volume 6, issue 61, Computer Press Agora, Tg-Mures, Romania, Oct., **1997**, pp. (37 - 43), ISSN 1220-9856.

## Publications: Conference Papers (37)

- [Conf 37] Valentin Stangaciu, Dan Pescaru, Mihai V. Micea, Vladimir I. Cretu, "Practical Aspects Regarding Implementation of Real Time WSN Applications Based on IEEE 802.15.4", in *Proceedings of the Telecommunications Forum, TELFOR 2013*, volume 21, Dorde Paunovic, Ljiljana Milic (Eds.), IEEE, Belgrade, Serbia, 26-28 Nov., **2013**, pp. (295 - 298), ISBN 978-1-4799-1419-7, DOI: 10.1109/TELFOR.2013.6716229. [CD-ROM support]. [Indexed: IEEE Xplore, IEEE].
- [Conf 36] Sinziana Indreica, Andrei Stancovici, Mihai V. Micea, Vladimir I. Cretu, Voicu Groza, "Simulator based study of robot alignment and localization", in *Proceedings of the International Symposium on Robotic and Sensors Environments, ROSE 2013*, Pinhas Ben-Tzvi, Philippe Giguere, Pierre Payeur (Eds.), IEEE, Washington, USA, 21-23 Oct., **2013**, pp. (107 - 111), ISBN 978-1-4673-2938-5, DOI: 10.1109/ROSE.2013.6698429. [CD-ROM support]. [Indexed: ISI Web of Science, Thomson Reuters].
- [Conf 35] Cristina S. Stangaciu, Mihai V. Micea, Vladimir I. Cretu, "Energy Efficiency in Real-Time Systems: A Brief Overview", in *Proceedings of the 8-th IEEE International Symposium on Applied Computational Intelligence and Informatics, SACI 2013*, Janos Fodor, Horia Ciocarlie (Eds.),

- IEEE, Timisoara, Romania, 23-25 May., **2013**, pp. (275 - 280), ISBN 978-1-4673-6397-6, DOI: 10.1109/SACI.2013.6608981. [CD-ROM support]. [Indexed: ISI Web of Science, Thomson Reuters].
- [Conf 34]** Andrei Stancovici, Sinziana Indreica, Mihai V. Micea, Vladimir I. Cretu, Voicu Groza, "Relative localization methodology for autonomous robots in collaborative environments", in *Proceedings of the 30-th IEEE Instrumentation and Measurement Technology Conference, I2MTC 2013*, Max Cortner, Reza Zoughi (Eds.), IEEE, Minneapolis, USA, 06-09 May., **2013**, pp. (1730 - 1733), ISBN 978-1-4673-4621-4, ISSN 1091-5281, DOI: 10.1109/I2MTC.2013.6555711. [CD-ROM support]. [Indexed: ISI Web of Science, Thomson Reuters].
- [Conf 33]** Mihai V. Micea, Cristina Stangaciu, Valentin Stangaciu, Vladimir I. Cretu, "Improving the Efficiency of Highly Predictable Wireless Sensor Platforms With Hybrid Scheduling", in *Proceedings of the International Symposium on Robotic and Sensors Environments, ROSE 2012*, Zug Sebastian, Pierre Payeur, Pinhas Ben-Tzvi (Eds.), IEEE, Magdeburg, Germany, 16-18 Nov., **2012**, pp. (73 - 78), ISBN 978-1-4673-2705-3, DOI: 10.1109/ROSE.2012.6402613. [CD-ROM support]. [Indexed: IEEE Xplore, IEEE].
- [Conf 32]** Bogdan Stratulat, Mihai V. Micea, Constantin Filote, "Data Fusion and Visualization Based on Voronoi Diagrams for Wireless Sensor Networks", in *Proceedings of the International Conference on Instrumentation, Measurement, Circuits and Systems, ICIMCS 2011*, volume 2, American Society of Mechanical Engineers (ASME), Hong Kong, China, 12-13 Dec., **2011**, pp. (41 - 44), ISBN 978-0-7918-5990-2. [Indexed: ISI Web of Science, Thomson Reuters].
- [Conf 31]** Razvan D. Cioarga, Mihai V. Micea, Vladimir I. Cretu, Andrei Banc, Voicu Groza, "Foodball: Emergent resource gathering in collective robotic environments", in *Proceedings of the International Workshop on Robotic and Sensors Environments, ROSE 2011*, Henrik Christensen, Guillaume-Alexandre Bilodeau (Eds.), IEEE, Montreal, Canada, 17-18 Sep., **2011**, pp. (184 - 189), ISBN 978-1-4577-0819-0, DOI: 10.1109/ROSE.2011.6058537. [CD-ROM support]. [Indexed: IEEE Xplore, IEEE].
- [Conf 30]** Valentin Stangaciu, Georgiana Macariu, Mihai V. Micea, Valentin Muresan, Brendan Barry, "Requirements of a Real-Time Multiprocessor Operating System for Multimedia Applications", in *Proceedings of the 6-th IEEE International Symposium on Applied Computational Intelligence and Informatics, SACI 2011*, Janos Fodor, Octavian Prostean (Eds.), IEEE, Timisoara, Romania, 19-21 May., **2011**, pp. (209 - 215), ISBN 978-1-4244-9108-7, DOI: 10.1109/SACI.2011.5873001. [CD-ROM support]. [Indexed: IEEE Xplore, IEEE].
- [Conf 29]** Constantin Filote, Calin Ciufudean, Mihai V. Micea, Ana-Maria Cozgarea, "Power Factor Improvement Using RNSIC Rectifier", in *Proceedings of the IASTED International Conference on Power and Energy Systems, AsiaPES 2010*, Issarachai Ngamroo (Eds.), The International Association of Science and Technology for Development (IASTED), Phuket, Thailand, 24-26 Nov., **2010**, pp. (96 - 102), ISBN 978-0-88986-855-7, ISSN 1922-8074, DOI: 10.2316/P.2010.701-090. [CD-ROM support]. [Indexed: Scopus, Elsevier B.V.].
- [Conf 28]** Bogdan Stratulat, Sebastian Barzeianu, Mihai V. Micea, Voicu Groza, "Wireless Synchronization Protocols for Collaborative Robotic and Sensor Environments", in *Proceedings of the 19-th IEEE International Workshop on Robotics in Alpe-Adria-Danube Region, RAAD 2010*, Aniko Szakal (Eds.), IEEE, Budapest, Hungary, 24-26 Jun., **2010**, pp. (25 - 30), ISBN 978-1-4244-6885-0, DOI: 10.1109/RAAD.2010.5524616. [CD-ROM support]. [Indexed: IEEE Xplore, IEEE].
- [Conf 27]** Mihai Fagadar Cosma, Mihai V. Micea, Vladimir I. Cretu, "Obtaining Highly Localized Edges using Phase Congruency and Ridge Detection", in *Proceedings of the IEEE International Joint Conferences on Computational Cybernetics and Technical Informatics, ICCC-CONTI 2010*, Janos Fodor, Octavian Prostean (Eds.), Politehnica University of Timisoara and Obuda University, Budapest, Timisoara, Romania, 27-29 May., **2010**, pp. (339 - 342), ISBN 978-1-4244-7431-8, DOI: 10.1109/ICCCYB.2010.5491252. [CD-ROM support]. [Indexed: IEEE Xplore, IEEE].
- [Conf 26]** Razvan D. Cioarga, Mihai V. Micea, Vladimir I. Cretu, Voicu Groza, "Evaluation of Fish Shoal Inspired Movement in Collaborative Robotic Environments", in *Proceedings of the 27-th IEEE Instrumentation and Measurement Technology Conference, I2MTC 2010*, Ruth A. Dyer, John L. Schmalzel, Vincenzo Piuri (Eds.), IEEE, Austin TX, USA, 03-06 May., **2010**, pp. (1539 - 1544), ISBN 978-1-4244-2832-8, ISSN 1091-5281, DOI: 10.1109/IMTC.2010.5488117. [CD-ROM support]. [Indexed: ISI Web of Science, Thomson Reuters].
- [Conf 25]** Constantin Filote, Dimitrie Alexa, Irinel V. Pletea, Mihai V. Micea, Calin Ciufudean, Ana-Maria Cozgarea, "Robust-Adaptive Flux Observers in Induction Motor Drive Systems", in *Proceedings of the 12-th IASTED International Conference on Intelligent Systems and Control, ISC 2009*, Mohamed Hamza (Eds.), The International Association of Science and Technology for Development (IASTED), Cambridge Massachusetts, USA, 02-04 Nov., **2009**, pp. (127 - 134), ISBN 978-0-88986-814-4. [CD-ROM support]. [Indexed: Scopus, Elsevier B.V.].
- [Conf 24]** Razvan D. Cioarga, Iuliana Nalatan, Sergiu Tura-Bob, Mihai V. Micea, Vladimir I. Cretu, Voicu Groza, "Emergent Exploration and Resource Gathering in Collaborative Robotic Environments", in *Proceedings of the International Workshop on Robotic and Sensors Environments, ROSE 2008*, Mel Siegel, Pierre Payeur (Eds.), IEEE, Ottawa, Canada, 17-18 Oct., **2008**, pp. (13 - 18), ISBN

- 978-1-4244-2594-5, DOI: 10.1109/ROSE.2008.4669173. [CD-ROM support]. [Indexed: ISI Web of Science, Thomson Reuters]. **[Times cited: 2]**.
- [Conf 23]** Razvan D. Cioarga, Bogdan Panus, Claudia Oancea, Mihai V. Micea, Vladimir I. Cretu, Emil M. Petriu, "Fish Shoal Inspired Movement in Robotic Collectives", in *Proceedings of the International Workshop on Robotic and Sensors Environments, ROSE 2008*, Mel Siegel, Pierre Payeur (Eds.), IEEE, Ottawa, Canada, 17-18 Oct., **2008**, pp. (7 - 12), ISBN 978-1-4244-2594-5, DOI: 10.1109/ROSE.2008.4669172. [CD-ROM support]. [Indexed: ISI Web of Science, Thomson Reuters].
- [Conf 22]** Mihai V. Micea, Cristina Certejan, Valentin Stangaciu, Razvan D. Cioarga, Vladimir I. Cretu, Emil M. Petriu, "Inter-Task Communication and Synchronization in the Hard Real-Time Compact Kernel HARETICK", in *Proceedings of the International Workshop on Robotic and Sensors Environments, ROSE 2008*, Mel Siegel, Pierre Payeur (Eds.), IEEE, Ottawa, Canada, 17-18 Oct., **2008**, pp. (19 - 24), ISBN 978-1-4244-2594-5, DOI: 10.1109/ROSE.2008.4669174. [CD-ROM support]. [Indexed: ISI Web of Science, Thomson Reuters]. **[Times cited: 1]**.
- [Conf 21]** Mihai V. Micea, Gabriel N. Carstoiu, Lucian Ungurean, Dan Chiciudean, Vladimir I. Cretu, Voicu Groza, "Predictable Data Communication Interface for Hard Real-Time Systems", in *Proceedings of the International Workshop on Robotic and Sensors Environments, ROSE 2008*, Mel Siegel, Pierre Payeur (Eds.), IEEE, Ottawa, Canada, 17-18 Oct., **2008**, pp. (98 - 101), ISBN 978-1-4244-2594-5, DOI: 10.1109/ROSE.2008.4669188. [CD-ROM support]. [Indexed: ISI Web of Science, Thomson Reuters].
- [Conf 20] Artur M. Kuczapski, Silviu Trebuian, Mihai G. Novac, Mihai V. Micea, Vladimir I. Cretu, Laurentiu A. Maniu, "Scheduling and Simulation of a Semiconductor Production Facility Using Petri Nets, Composite Dispatching Rules and Evolutionary Algorithms", in *Proceedings of the International Conference on Technical Informatics, CONTI 2008*, volume 1, Octavian Prostean (Eds.), Politehnica University of Timisoara, Timisoara, Romania, 05-06 Jun., **2008**, pp. (115 - 120), ISSN 1844-539X.
- [Conf 19]** Marius Marcu, Dacian Tudor, Horatiu Moldovan, Mihai V. Micea, "Power Profile Evaluation of Battery-Powered Mobile Applications", in *Proceedings of the 14-th IEEE International Conference on Electronics, Circuits and Systems, ICECS 2007*, IEEE, Marrakech, Morocco, 11-14 Dec., **2007**, pp. (1015 - 1018), ISBN 978-1-4244-1377-5, DOI: 10.1109/ICECS.2007.4511165. [CD-ROM support]. [Indexed: ISI Web of Science, Thomson Reuters].
- [Conf 18]** Razvan D. Cioarga, Mihai V. Micea, Bogdan Ciubotaru, Dan Chiciudean, Vladimir I. Cretu, Voicu Groza, "eBML: A Formal Language for Behavior Modeling and Application Development in Robotic Collectives", in *Proceedings of the International Workshop on Robotic and Sensors Environments, ROSE 2007*, Pierre Payeur, Subhas Mukhopadhyay (Eds.), IEEE, Ottawa, Canada, 12-13 Oct., **2007**, pp. (80 - 85), ISBN 1-4244-1527-6, DOI: 10.1109/ROSE.2007.4373972. [CD-ROM support]. [Indexed: IEEE Xplore, IEEE].
- [Conf 17]** Daniela Stanescu, Mircea Stratulat, Bogdan Ciubotaru, Dan Chiciudean, Razvan D. Cioarga, Mihai V. Micea, "Embedding Data in Video Stream Using Steganography", in *Proceedings of the 32-nd IEEE International Symposium on Applied Computational Intelligence and Informatics, SACI 2007*, Janos Fodor, Octavian Prostean (Eds.), Politehnica University of Timisoara and Budapest Tech, Timisoara, Romania, 17-18 May., **2007**, pp. (241 - 244), ISBN 978-1-4244-1234-X, DOI: 10.1109/SACI.2007.375518. [Indexed: ISI Web of Science, Thomson Reuters]. **[Times cited: 10]**.
- [Conf 16]** Bogdan Ciubotaru, Razvan D. Cioarga, Dan Chiciudean, Mihai V. Micea, Mircea Stratulat, "Connectivity Improvement in Wireless Sensor Networks Based on Mobile Nodes", in *Proceedings of the 24-th IEEE Instrumentation and Measurement Technology Conference, IMTC 2007*, Roman Z. Morawski (Eds.), IEEE, Warsaw, Poland, 01-03 May., **2007**, pp. (1640 - 1645), ISBN 978-1-4244-0588-6, ISSN 1091-5281, DOI: 10.1109/IMTC.2007.379002. [CD-ROM support]. [Indexed: ISI Web of Science, Thomson Reuters]. **[Times cited: 4]**.
- [Conf 15]** Razvan D. Cioarga, Bogdan Ciubotaru, Dan Chiciudean, Mihai V. Micea, Vladimir I. Cretu, Voicu Groza, "Emergent Behavioral Modeling Language in Obstacle Avoidance", in *Proceedings of the 24-th IEEE Instrumentation and Measurement Technology Conference, IMTC 2007*, Roman Z. Morawski (Eds.), IEEE, Warsaw, Poland, 01-03 May., **2007**, pp. (1614 - 1619), ISBN 978-1-4244-0588-6, ISSN 1091-5281, DOI: 10.1109/IMTC.2007.379001. [CD-ROM support]. [Indexed: ISI Web of Science, Thomson Reuters].
- [Conf 14]** Mihai Fagadar Cosma, Liviu D. Faniciu, Mihai V. Micea, "Data Routing and Remote Protocol Analysis using the TETHRA System", in *Proceedings of the 32-nd Annual Conference of the IEEE Industrial Electronics Society, IECON 2006*, Gerard A. Capolino, Leopoldo G. Franquelo (Eds.), IEEE, Paris, France, 06-10 Nov., **2006**, pp. (603 - 608), ISBN 1-4244-0136-4, ISSN 1553-572X, DOI: 10.1109/IECON.2006.347450. [Indexed: ISI Web of Science, Thomson Reuters]. **[Times cited: 1]**.
- [Conf 13]** Mircea Popa, Anca S. Popa, Vladimir I. Cretu, Mihai V. Micea, "Monitoring Serial Communications in Microcontroller Based Embedded Systems", in *Proceedings of the 32-nd IEEE International*

*Conference on Computer Engineering & Systems, ICCES 2006*, Hossam M. A. Fahmy, Ashraf M. Salem, Watheq M. El-Kharashi, Ayman M. Bahaa El-Din (Eds.), IEEE, Cairo, Egypt, 05-07 Nov., **2006**, pp. (56 - 61), ISBN 1-4244-0271-7, DOI: 10.1109/ICCES.2006.320425. [Indexed: ISI Web of Science, Thomson Reuters]. [Times cited: 12].

- [Conf 12] Razvan D. Cioarga, Mihai V. Micea, Bogdan Ciubotaru, Dan Chiciudean, Daniela Stanescu, "CORE-TX: Collective Robotic Environment - the Timisoara Experiment", in *Proceedings of the 3-rd IEEE International Symposium on Applied Computational Intelligence and Informatics, SACI 2006*, Janos Fodor, Octavian Prostean (Eds.), Politehnica University of Timisoara and Budapest Tech, Timisoara, Romania, 25-26 May., **2006**, pp. (495 - 506), ISBN 963-7154-46-9.
- [Conf 11] Mihai V. Micea, "Non-Preemptive Scheduling for Critical and Hard Real-Time Applications on Embedded Platforms", in *Proceedings of the 4-th International Conference on Microelectronics and Computer Science, ICMCS 2005*, volume 2, I. M. Tiginyanu, V. Sontea (Eds.), Technical University of Moldova, Chisinau, Rep. Moldova, 15-17 Sep., **2005**, pp. (53 - 56), ISBN 9975-66-040-1.
- [Conf 10] Mihai Fagadar Cosma, Liviu D. Faniciu, Mihai V. Micea, "TETHRA: TDM over Ethernet Router and Analyzer", in *Proceedings of the 4-th International Conference on Microelectronics and Computer Science, ICMCS 2005*, volume 2, I. M. Tiginyanu, V. Sontea (Eds.), Technical University of Moldova, Chisinau, Rep. Moldova, 15-17 Sep., **2005**, pp. (36 - 39), ISBN 9975-66-040-1.
- [Conf 9]** Mihai V. Micea, Vladimir I. Cretu, Voicu Groza, "Predictable Signal Generation with the Hard Real-Time Operating Kernel HARETICK", in *Proceedings of the 22-nd IEEE Instrumentation and Measurement Technology Conference, IMTC 2005*, volume 3, IEEE Instrumentation and Measurement Society, Ottawa, Canada, 16-19 May., **2005**, pp. (2097 - 2102), ISBN 0-7803-8879-8, DOI: 10.1109/IMTC.2005.1604543. [Indexed: IEEE Xplore, IEEE].
- [Conf 8] Erwin C. Lovasz, Marius Mateas, Mihai V. Micea, "Determination of the Human Spine Geometry with CCD-Camera", in *Proceedings of the Scientific Reunion of the Special Program of the Alexander von Humboldt Foundation - Sustainability for Humanity and Environment in the Extended Connection Field Science-Economy-Policy, SRSPA 2005*, volume 2, Ioana Ionel, Mihai Jadanent, Paul D. Oprisa Stanescu, Gelu Padure (Eds.), Editura Politehnica, Timisoara, Romania, 24-25 Feb., **2005**, pp. (292 - 295), ISBN 973-625-206-X. [Times cited: 1].
- [Conf 7] Mihai V. Micea, Vladimir I. Cretu, "Non-Preemptive Execution Support for Critical and Hard Real-Time Applications on Embedded Platforms", in *Proceedings of the International Symposium on Signals, Systems and Electronics, ISSSE 2004*, Kurt Schlacher, Robert Weigel, Gernot Kubin, Andreas Springer (Eds.), Johannes Kepler University Linz, Linz, Austria, 10-13 Aug., **2004**, ISBN 3-9501491-3-9. [CD-ROM support].
- [Conf 6] Mihai V. Micea, "HARETICK: A Real-Time Compact Kernel for Critical Applications on Embedded Platforms", in *Proceedings of the 7-th International Conference on Development and Application Systems, DAS 2004*, Adrian Graur, Gheorghe Pentiuc, Cristina Turcu, Cornel Turcu, Dan Milici (Eds.), Stefan cel Mare University of Suceava, Romania, 27-29 May., **2004**, pp. (16 - 23), ISBN 973-666-106-7.
- [Conf 5] Mihai V. Micea, Lucian Muntean, Daniel Brosteanu, "Embedded Techniques for Autonomous Robot Orientation", in *Proceedings of the 6-th International Conference on Development and Application Systems, DAS 2002*, Adrian Graur, G. Mahalu, Dan Milici, Gheorghe Pentiuc, Alin Potorac, Constantin Filote (Eds.), Stefan cel Mare University of Suceava, Romania, 23-25 May., **2002**, pp. (22 - 27), ISBN 973-98670-9-X.
- [Conf 4] Mihai V. Micea, Vladimir I. Cretu, Dan Chiciudean, "Communication Protocols Implementation on DSP-based Systems", in *Proceedings of the 10-th International Symposium on Systems Theory, SINTES 2000*, University of Craiova, Craiova, Romania, 25-26 May., **2000**, pp. (205 - 208), ISBN 973-98836. [Times cited: 1].
- [Conf 3] Mihai V. Micea, Lucian Muntean, Daniel Brosteanu, Dan Chiciudean, "Simple Real-time SONAR Implemented with DSP-based Boards", in *Proceedings of the 5-th International Conference on Development and Application Systems, DAS 2000*, Adrian Graur, Gheorghe Pentiuc, Alin Potorac, Constantin Filote, G. Mahalu, Dan Milici (Eds.), Stefan cel Mare University of Suceava, Romania, 18-20 May., **2000**, pp. (67 - 72), ISBN 973-8122-11-2.
- [Conf 2] Mihai V. Micea, Adrian Trifu, Mircea Trifu, "Distributed Digital Signal Processing Using DSP-based Boards and the Khoros Package on LINUX Platforms", in *Proceedings of the 5-th International Conference on Development and Application Systems, DAS 2000*, Adrian Graur, Gheorghe Pentiuc, Alin Potorac, Constantin Filote, G. Mahalu, Dan Milici (Eds.), Stefan cel Mare University of Suceava, Romania, 18-20 May., **2000**, pp. (61 - 66), ISBN 973-8122-11-2.
- [Conf 1] Mihai V. Micea, Iurie Guzun, Viaceslav Guzun, "Performant Multifunction I/O Board for the IBM PC AT", in *Proceedings of the 1-st International Conference on Microelectronics and Computer Science, ICMCS 1997*, volume 1, University of Chisinau, Chisinau, Rep. Moldova, 30-31 Oct., **1997**, pp. (167 - 171), ISBN 9975-910-25-4.

## Publications: Application Notes (4)

- [AppN 4] Mihai V. Micea, Lucian Muntean, Daniel Brosteanu, "Simple Real-time Sonar with the DSP56824", Motorola/Freescale Semiconductor Application Note, issue AN2086/D, Motorola/Freescale Semiconductor Inc., USA, Jun., **2001**, 28 pg..
- [AppN 3] Mihai V. Micea, Mircea Trifu, Adrian Trifu, "Integrating the DSP563xx in Distributed Computing Environments", Motorola/Freescale Semiconductor Application Note, issue AN2088, Motorola/Freescale Semiconductor Inc., USA, Mar., **2001**, 40 pg.. [Indexed: IEEE Xplore (Application Notes), IEEE].
- [AppN 2] Mihai V. Micea, Vladimir I. Cretu, Dan Chiciudean, "Interfacing a Data Acquisition System to the DSP56303", Motorola/Freescale Semiconductor Application Note, issue AN2087/D, Motorola/Freescale Semiconductor Inc., USA, Dec., **2000**, 28 pg.. [Indexed: IEEE Xplore (Application Notes), IEEE].
- [AppN 1] Mihai V. Micea, Dan Chiciudean, Lucian Muntean, "ECP Standard Parallel Interface for DSP56300 Devices", Motorola/Freescale Semiconductor Application Note, issue AN2085/D, Motorola/Freescale Semiconductor Inc., USA, Nov., **2000**, 26 pg.. [Indexed: IEEE Xplore (Application Notes), IEEE].