Dr VLADIMIR M. MLADENOVIC



Faculty of Technical Sciences Cacak University of Kragujevac, accredited Public institution Associate Professor Department of Information Technologies

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Date of birth: 13. March 1975. Place of birth: Paraćin, Serbia

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EDUCATION

Visiting professor – Hebrew University, The Engineering and Computer Science School, Jerusalem, Israel, January – September 2011.

PhD, Electrical Eng. – University of Kragujevac, Technical faculty, Cacak, Serbia, March 2009 Title: Development more functional computer acquisition system in low-voltage networks and electrical installations

MSc, Electrical Eng. – University of Nis, Faculty of Electrical Engineering, Nis, Serbia, May 2005 Title: *Statistical detection in communication channels when noise and fading present*

Dipl-Ing, Electrical Eng. - University of Nis, Faculty of Electrical Engineering, Nis, Serbia, Sept. 2000 Title: *Using ATM technique in SDH networks*

EXPERT SKILLS

- Symbolic computation and processing, modeling systems and processes, fast algorithms
- Artificial intelligence, machine learning, neural networks
- 5G EDGE computing, Wireless communication, IoT, Raspberry Pi & Arduino Implementation,
- Image processing and computer vision
- Mathematica Wolfram (Wolfram language), Matlab and Python.

EXPERIENCE

(October 2013 - Present) Associate Professor - University of Kragujevac, Faculty of Technical Sciences Cacak, Department of Information Technologies

Teaching courses:

- Software architecture
- Multimedia systems
- Data security
- Internet of things
- Contemporary communication systems (Master studies)
- Advanced web programming (Master studies)
- Analysis of multimedia contents (Master studies)
- Modern network technologies (PhD studies)

More courses up to 2016:

- Software engineering
- Computer networks and communications
- Network security

(October 2014 - October 2018) **Professor of Professional Studies** at the **Higher Technical School** Belgrade, Serbia (www.visokatehnicka.edu.rs/)

Teaching courses:

- Sensor and actuators
- Electrotechnique and electronic fundaments, Mechatronic systems

(September 2009 - October 2013) Professor of professional studies at the High Technical School of Professional Studies Požarevac, Serbia (www.vts-pozarevac.edu.rs/)

Teaching courses:

- Computer architecture
- Computer networks
- Microcontrollers
- Computer aided electronic circuit board design
- Digital signal processing

(September 2005 - September 2006) Lecturer at the Advanced School of Electrotechnical Engineering Belgrade – Department in Paracin, Serbia

Teaching courses:

- Computer technique and programming I and II
- Programming

(September 2004 – July 2010) **Teacher** at the School of Electrical Engineering Paracin, Serbia (secundary school)

Teaching courses:

- Programming in C/C++
- Microprocessors
- Networks&communications

(March 2003 – December 2006) **General manager** at the "SuperKom", company to design computer networks, software development and computer sales and service

(May 2001 – Februar 2005) IT manager at the Serbian Glass Factory (http://sfsparacin.com/index.html)

PATENTS

- 1. **QR code-based baggage tracking system**, Patent number 1722U1, Application N° 2021/8859 MP-2021/0035, Date of patent: 16.07.2021. Intellectual Property Office of Republic of Serbia
- 2. **Security insurance system for residential buildings**, Patent number 1721U1, Application N° 2021/8852 MP-2021/0031, Date of patent: 16.07.2021. Intellectual Property Office of Republic of Serbia
- 3. **A system for measuring the quality of running water based on the Internet of Things**, Patent number 1718U1, Application N° 2021/8796 MP-2021/0026, Date of patent: 15.07.2021. Intellectual Property Office of Republic of Serbia
- 4. **An Internet of Things based grocery tracking information system**, Patent number 1714U1, Application N° 2021/7816 MP-2021/0034, Date of patent: 24.06.2021. Intellectual Property Office of Republic of Serbia
- 5. **System for remote control of smart lighting based on internet of things**, Patent number 1711U1, Application No 2021/7319 MP-2021/0016, Date of patent: 14.06.2021. Intellectual Property Office of Republic of Serbia

- 6. **System for predicting fruit yields**, Patent number 1698U1, Application N° 2021/2894 MP-2020/0037, Date of patent: 10.03.2021. Intellectual Property Office of Republic of Serbia
- 7. **Device for automatic street delivery and payment of products from kiosk using a rotary crane**, Patent number 1401U1, Application N° 2012/5904 MP-2014/0045, Date of patent: 09.09.2014. Intellectual Property Office of Republic of Serbia http://www.zis.gov.rs/upload/documents/pdf sr/pdf/glasnik/GIS 2015/GIS-2015-1.pdf
- 8. **Wireless monitoring system for positioning, tracking, and text and voice data exchange**, Patent number 1328U, Application N° 2012/5904 MP-2012/0069, Date of patent: 09.05.2013. Intellectual Property Office of Republic of Serbia http://www.zis.gov.rs/upload/documents/pdf_sr/pdf/glasnik/GIS_2013/GIS_2013_4.pdf
- 9. **Electronic tour guide for Android platform with the development of the multimedia travel book**, Patent number 1268U, Application N° 2012/3692 MP-2011/0068, Date of patent: 18.05.2012. Intellectual Property Office of Republic of Serbia http://www.zis.gov.rs/upload/documents/pdf_sr/pdf/glasnik/GIS_2012/GIS_2012_4.pdf

TECHNICAL REPORT

- 1. The computer program in a symbolic language for fast calculations in closed-form for on artificial intelligence and machine learning based systems (serbian), Date: 16.10.2018. University of Kragujevac, Faculty of Technical Sciences Cacak
- 2. A computer program in a symbolic language to calculate the response time in a closed form for systems with pure delay (*serbian*), Date: 20.12.2015. University of Kragujevac, Faculty of Technical Sciences Cacak, http://itlab.ftn.kg.ac.rs/inc/TR32023.pdf

AWARDS

(December 2009) - OSCE Mission to Serbia Democratization Department Environmental Affair Section, Republic of Serbia, (SEEA) Energy Efficiency Agency of Republic of Serbia, Petnica Science Center, Republic of Serbia

• Awards for best supervisor of research projects in field of renewable sources: "Energy for the future 2009"

PROJECTS

- 1. **Anomaly detection based on 5G EDGE computing for surveillance video**, The scientific research and development projects between the Republic of Serbia and the People's Republic of China (2021-2023)
- 2. **Development of advanced system of hemodialysis monitoring with predicton of body fluid balance in children "LIFE_FOR_KIDS"**, The EUREKA Network Application E!13301 awarded the EUREKA (2020-2022)
- 3. **Performance optimization of energy-efficient computer and communication systems**, Project number: **TR-32023**, Ministry of Education, Science and Technological Development, Republic of Serbia (2011-2020) **Project leader**
- 4. **Tools planning for symbolical processing and OFDM analysis**, Wideband Radio Communications Laboratory, The Engineering and Computer Science School of the Hebrew University in Jerusalem, Israel (January 2011- September 2011)
- 5. **Development of curriculum and teacher competencies** for subjects in graduated academic studies of Information Technology accredited in 2017

- 6. **Development of curricula and teaching competencies** for subjects in graduated academic studies of Information Technology accredited in 2018
- 7. **Development of curricula and teaching competencies** for subjects in Master Academic Studies Information Technology accredited in 2018
- 8. **System for monitoring and evidence of daily rented apartments** a project funded by the Innovation Fund through Innovation Vouchers, 2018

INVITED LECTURE

- "Development System for Measuring Traffic Flow based on Internet of Things" 1st International Workshop on Intelligent Transportation & Information Technology, Beijing Jiaotong University, China, July 6th, 2019
- 2. **"Fast Computation of Iteration-Based Simulation Method"** lecture at the Vilniaus kolegija/University of Applied Sciences/Faculty of Electronics and Informatics, Vilnius, Lithuania March 7, 2019, Erasmus+ teaching programme
- 3. "A New Approach in Engineering Education and Knowledge Programming" lecture at the Silesian University of Technology, Institute for applied mathematics, Gliwice, Poland, May 23, 2018, Erasmus+ teaching programme
- 4. "A New Approach in Engineering Education and Knowledge Programming" invited lecture at the International conference "Cognitive methods of heterogeneous data analysis", Don State Technical University (DSTU), Rostov-on-Don, Russian Federation, September 15, 2017
- 5. "Fast Computation of Iteration-Based Simulation Method Case Study of Non-coherent ASK with Shadowing" invited lecture at the International conference "Cognitive methods of heterogeneous data analysis", Don State Technical University (DSTU), Rostov-on-Don, Russian Federation, September 13, 2017
- 6. "Computer Algebra System and Symbolic Processing-Knowledge Programming" invited lecture at the Research institute "Digital signal processing and computer vision", Don State Technical University (DSTU), Rostov-on-Don, Russian Federation, May 18, 2016
- 7. "Introduction in Computer Algebra Systems basic concept of Wolfram language" invited lecture at the Research institute "Digital signal processing and computer vision", Don State Technical University (DSTU), Rostov-on-Don, Russian Federation, May 19, 2016
- 8. "Computer Algebra and Symbolic Processing" invited lecture at the Goce Delcev University in Stip, Faculty of Electrical Engineering, Repulic of Macedonia, December 10, 2015.
- 9. "Computer Algebra and Symbolic Processing" invited lecture at the Tel Aviv University, Electrical Engineering-Systems Dept., August 03, 2011.

MEMBERS

- Guest Editor International Conference "Energy Efficiency and Energy Saving in Technical Systems" 2020 (EEESTS-2020), Rostov-on-Don, Russian Federation, June 16-17, 2020 https://conferencedts.wixsite.com/eeests?lang=en
- Program Committee board International Conference "Energy Efficiency and Energy Saving in Technical Systems" 2019 (EEESTS-2019), Rostov-on-Don, Russian Federation, June 16-17, 2020
 - https://conferencedts.wixsite.com/eeests/glavnaya?lang=en

• Editor's board - MATEC Web of Conferences, Volume 226 (2018), XIV International Scientific-Technical Conference "Dynamic of Technical Systems" (DTS-2018), Rostov-on-Don, Russian Federation, September 12-14, 2018

https://www.matec-conferences.org/articles/matecconf/abs/2018/85/contents/contents.html

 Editor's board - MATEC Web of Conferences - XIII International Scientific-Technical Conference "Dynamic of Technical Systems" (DTS-2017), Rostov-on-Don, Russian Federation, September 13-15, 2017

https://www.matec-conferences.org/articles/matecconf/abs/2017/46/contents/contents.html

- IEEE member Member Number 92101050
- Union of Engineers and Technicians of Serbia Member Number 563
- President of Society for Innovations and Technical-Technological Development of Paracin
- Scientific boards member The research institute "Digital signal processing and computer vision", Don State Technical University (DSTU) (Rostov-on-Don, Russian Federation). http://mm-dsp.com/en/scientific-boards-members.html

EDITOR OF JOURNALS

- **IEEE Access, Guest editor** https://ieeeaccess.ieee.org/special-sections/integrative-computer-vision-and-multimedia-analytics/
- Serbian journal of electrical engineering, Editor Assistants http://www.journal.ftn.kg.ac.rs/editorial.htm
- https://www.springer.com/gp/book/9783030706258

REVIEWER

 The Journal Tehnički vjesnik – Technical Gazette (TV-TG) www.tehnicki-vjesnik.com/web/public/page

CERTIFICATE

Licence for engineer of transfer technology - Certificate by The World Intellectual Property Organization (WIPO) and Serbian Intellectual Property Office – October 2012.

LANGUAGES

- **Serbian** native
- **English language** Certificate: *EAQUALS* (www.eaquals.org) certificate The European Association for Quality Language Services fluent
- Bosnian, Montenegrin, Croatian fluent
- Macedonian understand

PUBLICATIONS

- 1. Book chapter: An Operation-Reduced Fast Modeling in 5G Communication Systems, 5G Multimedia Communication Technology, Multiservices, and Deployment, CRC Press 2020, ISBN: 9780367178505,
 - https://www.routledge.com/5G-Multimedia-Communication-Technology-Multiservices-and-Deployment/Bojkovic-Milovanovic-
 - Fowdur/p/book/9780367178505?utm_source=crcpress.com&utm_medium=referral
- 2. Vladimir Mladenović, Miroslav Lutovac, Symbolic processing for system development using computer algebra, Monography, Faculty of technical sciences, Čačak, University of Kragujevac © 2020, ISBN: 978-86-7776-245-2 (in serbian)
- 3. Vladimir Mladenović, Nebojša Stanković, *Multimedia technologies and systems*, Textbook, Faculty of Technical Sciences in Cacak, University of Kragujevac © 2019, ISBN: 978-86-7776-231-5 (in serbian)
- 4. Vladimir Mladenović, Dragutin Debeljković, Nebojša Dimitrijević, *Modern Methods of Synthesis of Automatic Control Systems*, Monograph, Faculty of Technical Sciences in Cacak, University of Kragujevac © 2018, ISBN: 978-86-7776-223-0 (in serbian)
- 5. Vladimir Mladenović, Miroslav Lutovac, Dragutin Debeljković, *Stochastic identification of processes II part*, Monography, Faculty of technical sciences, Čačak, University of Kragujevac © 2016, ISBN: 978-86-7776-195-0 (in serbian)
- 6. **Vladimir Mladenović**, Miroslav Lutovac, Dragutin Debeljković, *Stochastic identification of processes I part*, Monography, Faculty of technical sciences, Čačak, University of Kragujevac © 2016, ISBN: 978–86–7776–194-3 (in serbian)
- 7. Vladimir Mladenović, Danijela Milošević, *The software architecture theory and application in practice*, Textbook, Faculty of technical sciences, Čačak, University of Kragujevac © 2016, ISBN: 978-86-7776-184-4 (in serbian)
- 8. Vladimir Mladenović, Dragutin Debeljković, Miroslav Lutovac, *The dynamics of control systems with delay*, Monography, Faculty of technical sciences, Čačak, University of Kragujevac © 2015, ISBN: 978-86-7776-181-3 (in serbian)
- 9. Damnjan Radosavljević, **Vladimir Mladenović**, **Web design**, Textbook, The Business Technical College of Vocational Studies, Užice, © 2014, ISBN: 978-86-83573-48-3 (in serbian)
- 10. Book chapter: *Telecommunications: Applications, Modern Technologies and Economic Impact*, Nova Science Publishers 2014, © Copyright 2004 2014, ISBN: 978-1-63117-141-3 https://www.novapublishers.com/catalog/product_info.php?products_id=47819

Relevant papers:

- 1. Application of multigraph sampling method in network traffic design of simulation model of integrated telecommunication and computer network, S. Miletić, V. Mladenović, and Ivan Pokrajac, E3S Web Conf., Volume 279, 2021, III International Conference "Energy Efficiency and Energy Saving in Technical Systems" (EEESTS-2021), https://doi.org/10.1051/e3sconf/202127902011, https://www.e3s-conferences.org/articles/e3sconf/pdf/2021/55/e3sconf eeests2021 02011.pdf
- 2. A family of adaptive Volterra filters based on maximum correntropy criterion for improved active control of impulsive noise, Asutosh Kar, Guttikonda Gowtham, Ankita Anand, Trideba Padhi, Pitikhate Sooraksa, **Vladimir Mladenovic**, Circuits, Systems, and Signal Processing (2021), ISSN 0278-081X, (Accepted)
- 3. Pedestrian Detection with Super-resolution Reconstruction for Low-Quality Image, Yi Jin; Yue Zhang; Yigang Cen; Yidong Li; **Vladimir Mladenovic**; Viacheslav Voronin, Pattern Recognition https://doi.org/10.1016/j.patcog.2021.107846

- 4. Zero-Shot Learning to Index on Semantic Trees for Scalable Image Retrieval, Kan, ShiChao; Cen, Yi; Cen, Yigang; Vladimir, Mladenovic; Li, Yang; He, Zhihai; IEEE Transactions on Image Processing, DOI: 10.1109/TIP.2020.3036779
- 5. A new methodology for designing of tactical integrated telecommunications and computer networks for OPNET simulation, S. Miletic, M. Milosevic, V. Mladenovic, OTEH 2020
- 6. Spatial Characterization of Telecommunication Satellites Visible Above The Republic of Serbia, S. Djukanovic, V. Mladenovic, M. Gligorijevic, D. Milosevic, I. Radojevic Aleksic, University Thought Publication in Natural Science, 2020
- 7. A Symbolic Encapsulation Point as Tool for 5G Wideband Channel Cross-Layer Modeling, N. Stefanovic, M. Blagojevic, I. Pokrajac, M. Greconici, Y. Cen, V. Mladenovic, A special issue of Entropy 2020, 22(10), 1151; doi:10.3390/e22101151
- 8. Higher order statistics of cooperative mobile-to-mobile relay communications over composite fading channels, C. Stefanovic, S. Panic, V. Mladenovic, S. Jovkovic; M. Stefanovic, International Journal of Ad Hoc and Ubiquitous Computing (IJAHUC), Vol. 35, No. 2, 2020, DOI: 10.1504/IJAHUC.2020.109792, https://www.inderscience.com/info/inarticle.php?artid=109792
- 9. Fake news detector algorithms, V. Mladenovic, A. Kar, D. Milosevic, I. Radojevic Aleksic, International Conference and Exhibition, Hotel "Izvor", Aranđelovac, Serbia, June 24–25, 2020, http://www.infotech.org.rs/en/index.html
- 10. *Hybrid detection of fake accounts on social networks*, D. Milosevic, A. Nandal, A. Dhaka, V. **Mladenovic**, I. Radojevic Aleksic, International Conference and Exhibition, Hotel "Izvor", Aranđelovac, Serbia, June 24–25, 2020, http://www.infotech.org.rs/en/index.html
- 11. 5G tool for evaluation and comparison of energy efficiency of mobile radio channel using second order statistics, N. Stefanovic, A. Kar, V. Mladenovic, International Conference "Energy Efficiency and Energy Saving in Technical Systems" 2020 (EEESTS-2020), Rostov-on-Don, Russian Federation, June 16-17, 2020, https://iopscience.iop.org/article/10.1088/1757-899X/900/1/012016/pdf
- 12. Nonlinear Acoustic Echo Cancellation with Kernelized Adaptive Filters, S. Sankara, A. Kar, S. Burraa, M.N.S.Swamy, V. Mladenovic, vol. 166, pp. 1-7, Applied Acoustics, Elsevier, 2020. https://linkinghub.elsevier.com/retrieve/pii/S0003682X20301080
- 13. A spectral-based pitch detection method, Sergey Makov, Alexander Minaev, Ilya Grinev, Dmitry Cherhyshov, Boris Kudruavcev and **Vladimir Mladenovic**, AIP Conference Proceedings 2188, 050005 (2019), XV International scientific-technical conference "Dynamic of Technical Systems" (DTS-2019), Rostov-on-Don, Russia, 11–13 September 2019, https://aip.scitation.org/doi/pdf/10.1063/1.5138432
- 14. Global Anomaly Detection based on a Deep Prediction Neural Network, Ang Li, Zhenjiao Miao, Yigang Cen, **Vladimir Mladenovic**, Liequan Liang, Xinwei Zheng, HCC 13th Conference on Human Centered Computing (HCC) 2019, Čačak, Serbia, 5-9. August 2019.
- 15. *Usability testing of a smartphone telecare application for informal caregivers*, Irena Lovrenčič Držanič, **Vladimir Mladenović**, Matjaž Debevc, Vesna Dolničar, Andraž Petrovčič, Simona Hvalič Touzery and Ines Kožuh, HCC 13th Conference on Human Centered Computing (HCC) 2019, Čačak, Serbia, 5-9. August 2019.
- 16. Development of an Algorithm Based on Artificial Intelligence and Neural Networks for Analyzing the Impact of the E-learning System on Students' Success, M. Simeunovic, V. Mladenovic, National conference with international participation: Information technologies, education and entrepreneurship (ITOP2019), Čačak, 06-07 April 2019, Serbai, pg. 21-28
- 17. Energy efficiency digital filter design for spectral analysis of primary electrical values, V. Mladenovic, C. Stefanovic, and S. Makov, E3S Web of Conferences 104, 02002 (2019), https://www.e3s-conferences.org/articles/e3sconf/abs/2019/30/e3sconf_eeests-2019 02002/e3sconf_eeests-2019 02002.html

- 18. Multiple Procedures for Fast Computation of an Iteration-Based Simulation Method, V. Mladenović, D. Milosević, M. Greconici, M. Lutovac, 5th International Conference on Electrical, Electronic and Computing Engineering, IcETRAN 2018, Palić, 11-14.06.2018 Serbia, ETRAN Society, Serbia, Session: EKI1.8, pg. 798-801
- 19. Environment and Graphical User Interface for Design of Continuous-Time Systems, M. Lutovac, M. Lutovac-Banduka, V. Mladenović, 5th International Conference on Electrical, Electronic and Computing Engineering, IcETRAN 2018, Palić, 11-14.06.2018 Serbia, ETRAN Society, Serbia, Session: EKI2.1, pp. 802-805
- 20. Predictive Analytics for Students' Success, D. Pokrajac, V. Mladenovic, 7th International Scientific Conference Technics and Informatics in Education, Faculty of Technical Sciences, Čačak, Serbia, 25–27th May 2018, pp 88-91, http://www.ftn.kg.ac.rs/konferencije/tie2018/Radovi%20TIE%202018/EN/Proceedings%20TIE%202018.pdf
- 21. The Application of the Artificial Neural Network in Analysing the Spread Quality, M. Petkovic, M. Blagojevic, V. Mladenovic, MATEC Web of Conferences, Volume 226 (2018), XIV International Scientific-Technical Conference "Dynamic of Technical Systems" (DTS-2018), Rostov-on-Don, Russian Federation, September 12-14, 2018

 https://www.matec-conferences.org/articles/matecconf/pdf/2018/85/matecconf dts2018 04042.pdf
- 22. An Operation Reduction Using Fast Computation of an Iteration-Based Simulation Method with Microsimulation-Semi-Symbolic Analysis, Mladenovic, V., Milosevic, D., Lutovac, M., Cen, Y.,
 - Debevc, M. A special issue of Entropy 2018, Volume 20(1), 62; doi:10.3390/e20010062, ISSN 1099-4300, http://www.mdpi.com/1099-4300/20/1/62 (M21)
- 23. Defect inspection for structural texture surface based on generalized low-rank approximations of matrices, Yan-Xing Wang, Yi-Gang Cen, Lie-Quan Liang, Ming Zeng, Vladimir Mladenovic, 2017 International symposium on intelligent signal processing and communication systems (ISPACS 2017), (2017), pg. 486-490, https://ieeexplore.ieee.org/document/8266527/
- 24. Fast Computation of the Iteration-Based Simulation Method Case Study of Non-coherent ASK with Shadowing, V. Mladenovic, S. Makov, Y. Cen, M. Lutovac, Serbian journal of electrical engineering, Vol. 14, No. 3, October 2017, pp 415-431, http://www.journal.ftn.kg.ac.rs/Vol_14-3/10-Mladenovic-Makov-Cen-Lutovac.pdf (M24)
- 25. SURF Binarization and Fast Codebook Construction for Image Retrieval, Shi-Chao Kan, Yi-Gang Cen, Yan-hong Wang, V. Mladenovic, Viacheslav Voronin, Journal of Visual Communication and Image Representation, Volume 49, November 2017, Pages 104-114, http://www.sciencedirect.com/science/article/pii/S1047320317301694 (M21)
- 26. Fusion of Deep Features and Weighted VLAD Vectors based on Multiple Features for Image Retrieval, Y. Wang, Y. Cen, L. Liang, L. Zhang, V. Voronin, V. Mladenovic, MATEC Web of Conferences - XIII International Scientific-Technical Conference "Dynamic of Technical Systems" (DTS-2017), Rostov-on-Don, Russian Federation, September 13-15, 2017, https://www.matec-conferences.org/articles/matecconf/pdf/2017/46/matecconf dts2017 05002.pdf
- 27. An Operation Reduced Calculation Method for Solving Complex Communication Systems, V. Mladenovic, D. Milosevic, M. Lutovac, Studies in Informatics and Control, ISSN 1220-1766, vol. 26(2), pp. 213-218, 2017. https://sic.ici.ro/wp-content/uploads/2017/06/SIC-2-2017-Art.9.pdf (M23)
- 28. *Multi-separable dictionary learning*, Fengzhen Zhang, Yigang Cen, Ruizhen Zhaoa, Shaohai Hua, V. **Mladenovic**, Signal Processing, 2017
- 29. An Advanced Adaptive System for Estimating the Duration of Dialysis for Children, V. Mladenović, M. Kostić, D. Milošević, Dušan Paripović, Aleksandar Peulić, Miroslav Lutovac, Conference ETRAN (Society for Electronics, Telecommunications, Computers, Automation and Nuclear Engineering), Srebrno jezero 5 8. Jun 2017. Serbia&Montenegro, EK1.1

- 30. An iteration-based simulation method for getting semi-symbolic solution of non-coherent FSK/ASK system by using computer algebra systems, V. Mladenovic, S. Makov, V. Voronin, M. Lutovac, Studies in Informatics and Control, ISSN 1220-1766, vol. 25(3), pp. 303-312, 2016. http://sic.ici.ro/?page_id=11567 (M23)
- 31. Contemporary symbolic modeling and analysis of analog integrated circuits and electrical engineering education with Wolfram language and Raspberry pi, V. Mladenović, 3nd International Conference on Electrical, Electronic and Computing Engineering, IcETRAN 2016, ETRAN Society, Serbia, Session: Electric circuits and systems and signal processing, 13. June 2016, Zlatibor, Invited Talk
- 32. A novel-iterative simulation method for performance analysis of non-coherent FSK/ASK systems over Rice/Rayleigh channels using the Wolfram language, Vladimir Mladenović, Danijela Milošević, Serbian journal of electrical engineering, Vol. 13, No. 2, June 2016, pp 157-174, www.journal.ftn.kg.ac.rs/Vol 13-2/02-Mladenovic-Milosevic.pdf (M24)
- 33. Introduction of computer algebra systems in electrical engineering education using Wolfram language on Raspberry pi, Vladimir Mladenović, Miroslav Lutovac, Sergey Makov, Technics and informatics in education, 6th International Conference, Faculty of Technical Sciences, Čačak, Serbia, 28–29th May 2016, pp 226-231, www.ftn.kg.ac.rs/konferencije/tio2016/Radovi%20TIO%202016/EN/Proceedings%20TIO%202016.p df
- 34. Software for modeling, analysis, and design of filters with LC sections and quartz crystals, Miroslav Lutovac, Vladimir Mladenovic, International scientific conference on ICT and e-business related research, April 22, 2016, Belgrade, pp 277-281, www.sinteza.singidunum.ac.rs
- 35. Teaching electrical engineering using Wolfram language, Miroslav Lutovac, Vladimir Mladenović, International scientific conference on ICT and e-business related research, April 22, 2016, Belgrade, pp 221-225, www.sinteza.singidunum.ac.rs
- 36. Analysis of system with pure time-delay using computer algebra systems, Miroslav Lutovac, Vladimir Mladenovic, Dragutin Debeljkovic, 23th Telecommunications forum, TELFOR 2015 IEEE COM SOC Chapter Serbia & Montenegro Belgrade, Serbia (serbian)
- 37. Simulation relations symbol / noise and energy efficiency using by computer algebraic tools case study OFDM receiver, V. Mladenovic, M. Lutovac, The Singidunum Journal of Applied Sciences 2015 (in serbian), http://portal.synthesis.singidunum.ac.rs/Media/files/2015/224-231.pdf
- 38. Contemporary Electronics with LTSpice and Mathematica, M. Lutovac, V. Mladenovic, The Singidunum Journal of Applied Sciences 2015, http://portal.synthesis.singidunum.ac.rs/Media/files/2015/134-138.pdf
- 39. *Teaching contemporary electronics using Wolfram language*, M. Lutovac, V. **Mladenovic**, 2nd International Conference on Electrical, Electronic and Computing Engineering, IcETRAN 2015, ETRAN Society, Serbia, Session: Electric circuits and systems and signal processing
- 40. Noncoherent FSK/ASK signal detection with two symbols correlated noise, V. Mladenovic, M. Lutovac, 2nd International Conference on Electrical, Electronic and Computing Engineering, IcETRAN 2015, ETRAN Society, Serbia, Session: Electric circuits and systems and signal processing http://etran.etf.rs/index_e.html
- 41. Innovation of the knowledge about standardized computer networks and communications, Ž. Micic, V. Mladenovic, University of Kragujevac, Serbia, The Singidunum Journal of Applied Sciences, ISSN: 2217-8090 (printed version), ISSN: 2217-8783 (electronic version), doI: 10.15308/SInteZa-2014-439-445, pages 439-445, http://sinteza.singidunum.ac.rs/en/
- 42. Development of Aeronautical Communication System for Air Traffic Control Using OFDM and Computer Algebra Systems, Maja Lutovac, Vladimir Mladenović, Miroslav Lutovac, journal Studies in Informatics and Control, ISSN 1220-1766, https://sic.ici.ro/past-issues/volume22-issue2-2013/lutovac/ (M23)

- 43. Symbolic Analysis as Universal Tool for Deriving Properties of Non-linear Algorithms Case study of EM Algorithm, Vladimir Mladenović, Miroslav Lutovac and Dana Porrat, Journal of Applied Sciences, Acta Polytechnica Hungarica, pg 117-136, ISSN 1785-8860, http://www.uni-obuda.hu/journal/Mladenovic Lutovac Porrat 48.pdf (M23)
- 44. Automated Proving Properties of Expectation-Maximization Algorithm Using Symbolic Tools, V. Mladenovic, M. Lutovac, M. Lutovac, Telfor Journal, Vol. 4, No. 1, 2012., ISSN 1821-3251, http://journal.telfor.rs/Published/Vol4No1/Vol4No1 A10.pdf
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