Autorul tezei de abilitare: Ivanovici Laurențiu-Mihail
Titlul tezei de abilitare: Analiza Texturilor Color și Multispectrale. Modele, Trăsături și Aplicații
Domeniul: Inginerie electronică și telecomunicații

LISTA DE LUCRĂRI

LUCRĂRI RELEVANTE

1. **M. Ivanovici**, *"Color and Multispectral Texture Image Analysis – Models, Features and Applications"*, Editura Universității Transilvania, Brașov, ISBN 978-606-19-0587-4, 2015

2. A. Căliman, **M. Ivanovici**, N. Richard, *"Probabilistic Pseudo-morphology for Grayscale and Color Images"*, PATTERN RECOGNITION, vol. 47, issue 2, pp. 721-735, 2014

3. R. Coliban, **M. Ivanovici**, *"Color and Multispectral Texture Characterization Using Pseudo-Morphological Tools"*, IEEE International Conference on Image Processing (ICIP), Paris, France, October 27-30, 2014

4. A. Căliman, **M. Ivanovici**, N. Richard, G. Toacșe, *„A Multivariate Mathematical Morphology Based on Orthogonal Transformation, Probabilistic Extrema Estimation and Distance Optimization"*, ISMM - 11th International Symposium on Mathematical Morphology (ISMM), May 27–29 2013, Uppsala, Sweden

5. **M. Ivanovici**, N. Richard, D. Paulus, *"Color Image Segmentation"*, in *"Advanced Color Image Processing and Analysis"*, Editor C. Fernandez-Maloigne, Springer New York, 2012

6. **M. Ivanovici**, D. Stoica - *"Color Diffusion Model for Active Contours - An Application to Skin Lesion Segmentation"*, 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), San Diego, August 28 - September 1, 2012

7. **M. Ivanovici**, N. Richard, *"Colour Fractal Dimension of Colour Fractal Images"*, IEEE TRANSACTIONS ON IMAGE PROCESSING, vol. 20, issue 1, pp. 227–235, 2011

8. **M. Ivanovici**, N. Richard - *"Colour Covering Blanket"*, International Conference on Image Processing, Computer Vision and Pattern Recognition (IPCV), Monte Carlo Resort, Las Vegas, Nevada, USA, July 12-15, 2010

9. **M. Ivanovici**, N. Richard, *"The Lacunarity of Colour Fractal Images"*, IEEE International Conference on Image Processing (ICIP), Cairo, Egypt, November 7-11, 2009

TEZA DE DOCTORAT

M. Ivanovici, *"Emularea degradării calității în rețelele de calculatoare – o perspectivă asupra măsurării performanței aplicațiilor folosind FPGA-uri / Network quality degradation emulation – an FPGA-based approach to application performance assessment"*, Universitatea Politehnica din București, coordonator științific: prof. dr. ing. Vasile Buzuloiu, data susținerii publice: 26 ianuarie 2006

CĂRȚI / CAPITOLE DE CĂRȚI

1. **M. Ivanovici**, *"Color and Multispectral Texture Image Analysis – Models, Features and Applications"*, Editura Universității Transilvania, Brașov, ISBN 978-606-19-0587-4, 2015

2. **M. Ivanovici**, *"Computer Network Emulation for Quality of Experience Assessment"*, Editura Universității Transilvania, Brașov, ISBN 978-606-19-0586-7, 2015

3. R. Andonie, A. Cațaron, H. Gâlmeanu, **M. Ivanovici**, L. Sasu, *„Algoritmi și Structuri de Date pentru Imagistică și Bioinformatică. Note de curs"*, Editura Universității Transilvania, Brașov, ISBN 978-606-19-0206-4, 2013

4. P.N. Borza, **L.M. Ivanovici**, *"Analiza și prelucrarea la distanță a semnalelor și imaginilor medicale"*, Editura UT Press, Cluj-Napoca, 978-973-662-889-4, 2013

5. **M. Ivanovici**, N. Richard, D. Paulus, *"Color Image Segmentation",* in *"Advanced Color Image Processing and Analysis",* Editor: Christine Fernandez-Maloigne, Springer New York, ISBN 978-1-4419-6190-7, 2012

6. R. Andonie, A. Cațaron, Z. Gaspar, H. Gâlmeanu, **M. Ivanovici**, I. Lorentz, L. Sasu, *„Algoritmi și Structuri de Date. Aplicații în Imagistică și Bioinformatică. Note de curs"*, Editura Universității Transilvania, Brașov, ISBN 978-606-19-0058-9, 2012

7. **M. Ivanovici**, R. Beuran, *"Correlating QoE and QoS for Network Applications"*, in *"Quality of Service Architectures for Wireless Networks: Performance, Metrics and Management"*, Editors: S. Adibi, R. Jain, S. Parekh, M. Tofighbakhsh, IGI-Global Publishing, ISBN 978-161-692-235-1, 2010

8. C. Z. Kertesz, **L.M. Ivanovici**, *"Procesarea digitală a semnalelor – îndrumar de laborator"*, Editura Universității, Brașov, 2009.

9. **M. Ivanovici**, *"Procesarea imaginilor – îndrumar de laborator"*, Editura Universității Transilvania, Brașov, ISBN 978-973-635-674-2 2006.

ARTICOLE ÎN REVISTE

1. A. Căliman, **M. Ivanovici**, N. Richard, *"Probabilistic Pseudo-morphology for Grayscale and Color Images",* PATTERN RECOGNITION, vol. 47, issue 2, pp. 721-735, 2014

2. B. Budescu, A. Căliman, **M. Ivanovici**, *"The Correlation Dimension: A Video Quality Measure"*, Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, Vol. 79, Part 1, pp. 55 - 64, 2012

3. **M. Ivanovici**, N. Richard, *"Colour Fractal Dimension of Colour Fractal Images"*, IEEE TRANSACTIONS ON IMAGE PROCESSING, vol. 20, issue 1, pp. 227–235, 2011

4. **M. Ivanovici**, N. Richard, C. Fernandez-Maloigne - *"Towards Video Quality Metrics based on Colour Fractal Geometry"*, Hindawi EURASIP Journal of Image and Video Processing, vol. 2010, article ID 308035, 2010

5. **M. Ivanovici**, S. Savu - *"Measuring the User-perceived Quality for VoIP Appplications in Encrypted Wireless Networks"*, Scientific Bulletin of University "POLTEHNICA" Bucharest, C Series (Electrical Engineering), nr. 2, 2010, ISSN 1454-234x, June 2010.

6. **M. Ivanovici**, N. Richard, H. Decean**,** *"Fractal analysis and characterization of human skin images in cosmetology"*, Scientific Bulletin of "Politehnica" University Bucharest, B Series, vol. 71, nr. 2, 2009, ISSN 1454-2331, pp. 67-76.

7. B. Martin, A. Al-Shabibi, S.M. Batraneanu, M.D. Ciobotaru, G.L. Darlea, **M. Ivanovici**, L. Leahu, S.N. Stancu**,** *"Advanced monitoring techniques for a large-scale data-processing network"*, Campus-Wide Information Systems - The International Journal of Information and Learning Technology, Vol. 25, issue 5, pp. 287-300, 2008.

8. S.M. Batraneanu, A. Al-Shabibi, M.D. Ciobotaru, **M. Ivanovici**, L. Leahu, B. Martin, S.N. Stancu, *"Operational Model of the ATLAS TDAQ Network"*, IEEE TRANSACTIONS ON NUCLEAR SCIENCE, Vol. 55, Issue 2, pp. 687-694, April 2008.

9. **M. Ivanovici**, *"Objective Performance Evaluation for MPEG-4 Video Streaming Applications"*, Scientific Bulletin of University "Poltehnica" Bucharest, C Series (Electrical Engineering), vol. 67, nr. 3, pp. 55-64, 2005

10. R. Beuran, **M. Ivanovici**, V. Buzuloiu, *"File Transfer Performance Evaluation"*, Scientific Bulletin of University "POLTEHNICA" Bucharest, C Series (Electrical Engineering), vol. 66, no. 2-4, 2004, pp. 3-14.

11. K. Korcyl, G. Sladowski, R. Beuran, R. W. Dobinson, C. Meirosu, **M. Ivanovici**, M. L. Maia**,** *"Network performance measurements as part of feasibility studies on moving part of the ATLAS Event Filter to off-site Institutes"*, LECTURE NOTES IN COMPUTER SCIENCE, Vol. 2970, pp. 206-213, 2004

ARTICOLE PUBLICATE IN VOLUME ALE CONFERINȚELOR INTERNAȚIONALE

1. R.-M. Coliban, **M. Ivanovici**, I. Szekely, *"Fast Probabilistic Pseudo-Morphology for Noise Reduction in Color Images"*, 9th International Conference Interdisciplinarity in Engineering, INTER-ENG, Tg. Mureș, 8-9 October, 2015

2. V. Comanelea, **M. Ivanovici**, R. Andonie, *"Feature Extraction from Satellite Image: a GPU-based Machine Learning Approach"*, Conference on Big Data from Space (BiDS '14), ESRIN, Frascati, Italy, 12-14 November 2014

3. R. Coliban, **M. Ivanovici**, I. Szekely, *"Texture characterization and image segmentation using Haar patterns and evolutionary processes"*, International Conference on Optimization Of Electrical And Electronic Equipment (OPTIM), Pages: 980-985, Romania, May 22-24, 2014

4. A. Ledoux, N. Richard, A.S. Capelle-Laize, **M. Ivanovici**, *"Vector texture features for colour images: construction and elements of comparison"*, International Conference On Optimization Of Electrical And Electronic Equipment (OPTIM), Pages: 980-985, Romania, May 22-24, 2014

5. R. Andreiu, R. Coliban, A. Cataron, **M. Ivanovici**, *"Pattern-Based Rough Segmentation of Satellite Images Using Evolutionary Algorithms"*, ESA-EUSC-JRC 9th Conference on Image Information Mining – The Sentinels Era, Bucharest, Romania, 5th-7th March, 2014

6. R. Coliban, **M. Ivanovici**, *"Color and Multispectral Texture Characterization Using Pseudo-Morphological Tools"*, IEEE International Conference on Image Processing (ICIP), Paris, France, October 27-30, 2014

7. A. Căliman, **M. Ivanovici**, N. Richard, G. Toacşe, *"A Multivariate Mathematical Morphology Based on Orthogonal Transformation, Probabilistic Extrema Estimation and*

Distance Optimization", ISMM - 11th International Symposium on Mathematical Morphology (ISMM), Uppsala, Sweden, May 27–29 2013

8. **M. Ivanovici**, D. Stoica - *"Color Diffusion Model for Active Contours - An Application to Skin Lesion Segmentation*", 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC, San Diego, August 28 - September 1, 2012

9. A. Căliman, **M. Ivanovici** - *"Psoriasis Image Analysis Using Color Lacunarity"*, The 13th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM'12, Brasov, Romania, May 24-26, 2012

10. Z. Gaspar, D. Stoica, **M. Ivanovici** - *"Color Diffusion Model Acceleration on GPUs"*, The 13th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM'12, Brasov, Romania, May 24-26, 2012

11. G.M. Danciu, S.M. Banu, **M. Ivanovici** - *"Scale and Rotation-Invariant Feature Extraction for Color Images of Iris Melanoma"*, The 13th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM'12, Brasov, Romania, May 24-26, 2012

12. **M. Ivanovici**, A. Căliman, N. Richard**,** C. Fernandez-Maloigne - *"Towards a Multivariate Probabilistic Morphology for Colour Images"*, CGIV 2012 - 6th European Conference on Colour in Graphics, Imaging and Vision, Amsterdam, the Netherlands, May 6-9, 2012

13. A. Căliman, **M. Ivanovici**, N. Richard - *"Fractal feature-based Color Image Segmentation for a Health Care Application in Dermatology",* International Conference on e-Health and Bioengineering, EHB 2011, Iasi, Romania, November 24-26, 2011

14. D. Paulus, **M. Ivanovici**, N. Richard - "Segmentierung von Farbfraktalen", 17. Farbbildverarbeitungsworkshop 2011, Konstanz am Bodensee, Deutchland, 29./30. September 2011

15. B. Budescu, A. Căliman, **M. Ivanovici** - *"The Correlation Dimension – A Video Quality Measure"*, 7th International ICST Mobile Multimedia Communications Conference, Cagliari, Italy, 5-7 September 2011

16. A. Căliman, **M. Ivanovici**, N. Richard - *"Colour Fractal Dimension for Psoriasis Image Analysis"*, Signal Processing and Applied Mathematics for Electronics and Communications, Cluj-Napoca, Romania, August 26-28, 2011

17. **M. Ivanovici**, N. Richard - *"Colour Covering Blanket"*, IPCV'10 - International Conference on Image Processing, Computer Vision and Pattern Recognition, Monte Carlo Resort, Las Vegas, Nevada, USA, July 12-15, 2010.

18. M. Turiac, **M. Ivanovici**, T. Radulescu, V. Buzuloiu - *"Variance-driven Active Contours"*, IPCV'10 - International Conference on Image Processing, Computer Vision and Pattern Recognition, Monte Carlo Resort, Las Vegas, Nevada, USA, July 12-15, 2010

19. **M. Ivanovici**, N. Richard**,** C. Fernandez-Maloigne - *"Colour Fractal Analysis for Video Quality Assessment"*, CGIV 2010 - 5th European Conference on Colour in Graphics, Imaging and Vision, Joensuu, Finland, June 14-18, 2010

20. **M. Ivanovici**, S. Savu - *"The Quality of Multiple VoIP Calls in an Encrypted Wireless Network"*, The 12th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM'10, Brasov, Romania, 20-22 May, 2010

21. G. Danciu, **M. Ivanovici**, V. Buzuloiu - *"Improved Contours for ToF Cameras based on Vicinity Logic Operations"*, The 12th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM'10, Brasov, Romania, 20-22 May, 2010

22. **M. Ivanovici**, N. Richard, *"The Lacunarity of Colour Fractal Images"*, ICIP'09 IEEE International Conference on Image Processing, Cairo, Egypt, November 7-11, 2009

23. **M. Ivanovici**, P. Borza, L. Nedelcu, H. Decean, C. Falup, M. Romanca, I. Szekely - *"Prospects for the Design of an E-health System for Monitoring Patients with Diabetes and Stroke"*, WSEAS 2009 International Conferences, Applied Computing Conference ACC'09, Special Session on New Trends in Developing Services in Medicine and Life Sciences (MeLiS), Athens, Greece, September 28-30, 2009

24. **M. Ivanovici**, N. Richard, H. Decean, *"Fractal Dimension and Lacunarity of Psoriatic Lesions – A Colour Approach"*, EHB'09 International Conference on e-Health and Bioengineering, Constanţa, România, September 17-18th, 2009

25. **M. Ivanovici**, N. Richard, H. Decean - *"The Fractal Dimension and Lacunarity of Psoriatic Lesions - A Colour Approach"*, Recent Advances in Biomedical Electronics and Biomedical Informatics, Proceedings of the 2nd WSEAS International Conference on Biomedical Electronics and Biomedical Informatics (BEBI'09), Moscow, Russia, August 20-22, pp. 199-202, 2009

26. **M. Ivanovici**, N. Richard, V. Buzuloiu, *"Colour Fractal Image Generation"*, IPCV'09 International Conference on Image Processing, Computer Vision and Pattern Recognition, Monte Carlo Resort, Las Vegas, Nevada, USA, July 13-16, 2009

27. S. Oprisescu, C. Burlacu, V. Buzuloiu, **M. Ivanovici**, *"Action Recognition for Simple and Complex Actions using Time of Flight Cameras"*, IPCV'09 International Conference on Image Processing, Computer Vision and Pattern Recognition, Monte Carlo Resort, Las Vegas, Nevada, USA, July 13-16, 2009

28. **M. Ivanovici**, V. Scurtu, *"Optical Disc Detection in Retinal Images"*, The 11th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM'08, Brasov, Romania, 22-24 May, pp. 119-124, 2008

29. L. Iliut, N. Filip, **M. Ivanovici**, *"A Comparative View of the Inductive Loop Detectors and of the Video Surveillance Cameras' Efficiency"*, International Congress Automotive, Environment and Farm Machinery, AMMA 2007, Cluj-Napoca, Romania, October 11-13, 2007

30. **M. Ivanovici**, A. L. Iliut, D. Florea, *"Vehicle Motion Tracking by Means of Cross-Correlation"* , International Congress Automotive, Environment and Farm Machinery, AMMA 2007, Cluj-Napoca, Romania, October 11-13, 2007

31. S. M. Batraneanu, L. Leahu, B. Martin, A. Al-Shabibi, **M. Ivanovici**, M. D. Ciobotaru, S. N. Stancu - *"Operational Model of the ATLAS TDAQ Network"*, The 15th IEEE NPSS Real Time Conference 2007, Fermilab, Batavia Illinois, U.S.A., April 29 - May 4, 2007

32. **M. Ivanovici**, R. Beuran, *"User-perceived Quality Assessment for Multimedia Applications"* , The 10th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM'06, vol. IV, pp. 55-60, Brasov, Romania, May 18-19, 2006

33. **M. Ivanovici**, R. Beuran, N. Davies**, *"Assessing Application Performance in Degraded Network Environments: an FPGA-based approach"*, Communicating Process Architectures, Eindhoven, Netherlands, September 18-21, 2005

34. M. Ciobotaru, **M. Ivanovici**, R. Beuran, S. Stancu, *"Versatile FPGA-based Hardware Platform for Gigabit Ethernet Applications"* , 6th Annual Postgraduate Symposium on The Convergence of Telecommunications, Networking and Broadcasting, Liverpool, UK, June 27-28, pp. 391-395, 2005

35. R. Beuran, **M. Ivanovici**, N. Davies, B. Dobinson, *"Evaluation of the Delivery QoS Characteristics of Gigabit Ethernet Switches"*, CERN-OPEN-2005-002, CERN, Geneva, Switzerland, December 2004

36. R. Beuran, **M. Ivanovici**, *"User-Perceived Quality Assessment for VoIP Applications"*, technical report (delivered to U4EA Technologies), CERN-OPEN-2004-007, CERN, Geneva, Switzerland, January 2004

37. R. Beuran, **M. Ivanovici**, B. Dobinson, N. Davies, P. Thompson,*"Network Quality of Service Measurement System for Application Requirements Evaluation"*, International Symposium on Performance Evaluation of Computer and Telecommunication Systems, July 20-24, 2003, Montreal, Canada, pp. 380-387

38. K. Korcyl, G. Sladowski, R. Beuran, R. W. Dobinson, C. Meirosu, **M. Ivanovici**, M. L. Maia**,** *"Network performance measurements as part of feasibility studies on moving part of the ATLAS Event Filter to off-site Institutes"* , First European Across Grids Conference, Santiago de Compostela, Spain, February 2003

39. K. Korcyl, G. Sladowski, R. Beuran, R. W. Dobinson, C. Meirosu, **M. Ivanovici**, M. L. Maia, *"Network performance measurements for massive data transfers between CERN Geneva and Cyfronet Cracow"*, Cracow Grid Workshop, Cracow, Poland, December 2002

Data: 26 octombrie 2015   conf. dr. ing. Ivanovici Laurențiu-Mihail