

Listă de lucrări

Şef lucrări dr. ing. Radu-Mihai COLIBAN

Teza de doctorat

R.M. Coliban, *Achiziția și prelucrarea neliniară a informațiilor cu aplicații în imagistică și experimente fizice complexe*, Universitatea Transilvania din Braşov, conducător științific: prof. dr. ing. Iuliu Szekely, data susținerii publice: 27.11.2017.

Cărți / material didactic

1. R.M. Coliban, M. Ivanovici, *De la color la hiperspectral: Elemente de achiziția, analiza și prelucrarea imaginilor*, Editura Universității Transilvania, Braşov, 2022, ISBN 978-606-19-1499-9.
2. R.M. Coliban, M. Ivanovici, *Prelucrarea semnalelor – îndrumar de laborator*, Editura Universității Transilvania, Braşov, 2018, ISBN 978-606-19-1039-7.
3. Z. Gaspar, R.M. Coliban, A. Stanciu, *Sisteme pe bază de microprocesor: Implementări pe placa de dezvoltare Xilinx Spartan 3E*, Editura Universității Transilvania, Braşov, 2012, ISBN 978-606-19-0122-7.

Articole în reviste ISI

1. Ş. Opreşescu, R.M. Coliban, M. Ivanovici, *Polarization-based optical characterization for color texture analysis and segmentation*, Pattern Recognition Letters, Vol. 163, 2022, pp. 74-81, ISSN 0167-8655.
2. R.M. Coliban, M. Marincaş, C. Hatfaludi, M. Ivanovici, *Linear and non-linear models for remotely-sensed hyperspectral image visualization*, Remote Sensing, Vol. 12, Issue 15, 2479, 2020, ISSN 2072-4292
3. M. Ivanovici, R.M. Coliban, C. Hatfaludi, I.E. Nicolae, *Color image complexity versus over-segmentation: a preliminary study on the correlation between complexity measures and number of segments*, Journal of Imaging, Vol. 6, Issue 4, 16, 2020, ISSN 2313-433X

4. R.M. Coliban, M. Ivanovici, *Reducing the oversegmentation induced by quasi-flat zones for multivariate images*, Journal of Visual Communication and Image Representation, Vol. 53, 2018, pp. 281-293, ISSN 1047-3203.
5. R.M. Coliban, M. Ivanovici, N. Richard, *Improved probabilistic pseudo-morphology for noise reduction in colour images*, IET Image Processing, Vol. 10, Issue 7, 2016, pp. 505-514, ISSN 1751-9667.
6. R.M. Coliban, S. Popa, T. Tulbure, D. Nicula, M. Ivanovici, S. Martoiu, L. Levinson, J. Vermeulen, *The Read Out Controller for the ATLAS New Small Wheel*, Journal of Instrumentation, Vol. 11, 2016, C02069, ISSN 1748-0221.

Articole în volume ale conferințelor internaționale

1. R.M. Coliban, *Fast Radix-2 Montgomery Modular Multiplication on FPGA Using Ternary Adder*, 5th International Conference on Computing, Electronics & Communications (iCCECE), Southend, Marea Britanie, 17-18 august 2022.
2. R.M. Coliban, *FPGA Implementation of Interleaved Modular Multiplier with Improved Area-time Efficiency*, 11th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS), Cracovia, Polonia, 22-25 septembrie 2021 (indexat ISI).
3. M. Ivanovici, I. Nicolae, R.M. Coliban, *Umbra-based Improvement of the Probabilistic Box-Counting Fractal Dimension Estimation*, International Symposium on Signals, Circuits and Systems (ISSCS), Iași, 15-16 iulie 2021.
4. R.M. Coliban, *Extended Probabilistic Pseudo-Morphology for Real-World Image Denoising*, 12th International Symposium on Advanced Topics in Electrical Engineering (ATEE), București, 25-27 martie 2021 (indexat ISI).
5. M. Ivanovici, M. Marinceș, R.M. Coliban, *A Vector Median Filter For Hyperspectral Images Based On Lexicographic Ordering of Estimated Auto-Correlation Functions*, 11th Workshop on Hyperspectral Imaging and Signal Processing: Evolution in Remote Sensing (WHISPERS), Amsterdam, Țările de Jos, 24-26 martie 2021 (indexat ISI).

6. S. Popa, M. Ivanovici, **R.M. Coliban**, *Time-multiplexed 10 Gbps Ethernet-based integrated logic analyzer for FPGAs*, 14th International Symposium on Electronics and Telecommunications (ISETC), Timișoara, 5-6 noiembrie 2020 (indexat ISI).
7. M. Ivanovici, C. Hatfaludi, **R.M. Coliban**, *Color fractal texture image complexity estimation using a convolutional neural network*, 14th International Symposium on Electronics and Telecommunications (ISETC), Timișoara, 5-6 noiembrie 2020 (indexat ISI).
8. M. Ivanovici, **R.M. Coliban**, *Spectral signature ranking based on lexicographic ordering of autocorrelation function values*, International Symposium on Signals, Circuits and Systems (ISSCS), Iași, 11-12 iulie 2019 (indexat ISI).
9. S. Popa, S. Martoiu, M. Luchian, **R.M. Coliban**, M. Ivanovici, *The quality-assurance test of the ATLAS New Small Wheel Read-Out Controller ASIC*, Topical Workshop on Electronics and Particle Physics (TWEPP), Antwerp, Belgia, 17-21 septembrie 2018.
10. A. Machidon, **R.M. Coliban**, O. Machidon, M. Ivanovici, *Maximum distance-based PCA approximation for hyperspectral image analysis and visualization*, 41st International Conference on Telecommunications and Signal Processing (TSP), Atena, Grecia, 4-6 iulie 2018 (indexat ISI).
11. **R.M. Coliban**, A. Radoi, M. Ivanovici, *A color and multispectral fractal model for forest region identification in satellite images*, International Conference on Communications (COMM), București, 9-10 iunie 2016 (indexat ISI).
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13. **R.M. Coliban**, M. Ivanovici, *Color and multispectral texture characterization using pseudo-morphological tools*, IEEE International Conference on Image Processing (ICIP), Paris, Franța, 27-30 octombrie 2014 (indexat ISI).
14. **R.M. 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), Bran, 22-24 mai 2014 (indexat ISI).

15. R. Andreiu, **R.M. Coliban**, A. Cataron, M. Ivanovici, *Pattern-based rough segmentation of satellite images using evolutionary algorithms*, ESA-EUSC-JRC 9th Conference on Image Information Mining (IIM), București, 5-7 martie 2014.
16. A. Caliman, M. Ivanovici, **R.M. Coliban**, *Pseudo-granulometry and morphological covariance for color psoriasis image segmentation*, E-Health and Bioengineering conference (EHB), Iași, 21-23 noiembrie 2013 (indexat ISI).

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