

# MARINA MARJANOVIĆ

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## **Obrazovanje:**

- **Doktorska disertacija**  
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## **Knjige:**

- **S. Deshpande, . Walambe, K. Kotecha, M. Marjanović-Jakovljević, Conference Proceedings-Advanced Computing, Springer, 2022**
- **M. Marjanović-Jakovljević, Conference Proceedings-Advanced Computing, Springer, 2022**

## **Radovi u časopisima:**

- **M. Mihajlovic, M. Marjanović, Enhancing Instance Segmentation in High-Resolution Images Using Slicing-Aided Hyper Inference and Spatial Mask Merging Optimized via R-Tree Indexing, Mathematics, 2025**
- **M. Mihajlovic, M. Marjanović, "Medical Segmentation of Kidney Whole Slide Images Using Slicing Aided Hyper Inference and Enhanced Syncretic Mask Merging Optimized by Particle Swarm Metaheuristics", BioMedInformatics, 2025**
- **M. Mihajlovic, M. Marjanović, Medical Segmentation of Kidney Whole Slide Images Using Slicing Aided Hyper Inference and Enhanced Syncretic Mask Merging Optimized by Particle Swarm Metaheuristics, BioMedInformatics, 2025**
- **N. Panić, M. Marjanović, T. Bezdan, Addressing Demographic Bias in Age Estimation Models through Optimized Dataset Composition, Mathematics, Vol. 12, No. 15, pp. 2358 - 2358, Jul, 2024**
- **M. Radaković, M. Marjanović, I. Ristić, V. Kuleto, M. Ilić, S. Dabić Miletić, Serbian Sign Language Alphabet: A unique authentic dataset of letter sign gestures, Mathematics, Feb, 2024**
- **N. Bacanin, M. Zivkovic, M. Antonijevic, K. Venkatachalam, J. Lee, Y. Nam, M. Marjanovic, I. Strumberger, M. Abouhawwash, Addressing feature selection and extreme learning machine tuning by diversity-oriented social network search: an application for phishing websites detection, Complex & Intelligent Systems, pp. 1 - 36, Jun, 2023**
- **M. Zivkovic, N. Bacanin, M. Antonijevic, B. Nikolic, G. Kvascev, M. Marjanovic, N. Savanovic, Hybrid CNN and XGBoost Model Tuned by Modified Arithmetic Optimization Algorithm for COVID-19 Early Diagnostics from X-ray Images, ELECTRONICS, Vol. 11, No. 22, 3798, pp. 1 - 30, Nov, 2022**
- **K. Aktas, V. Ignjatovic, D. Ilic, M. Marjanović-Jakovljević, G. Anbarjafari, Deep convolutional neural networks for detection of abnormalities in chest X-rays trained on the very large dataset, Springer Nature Computer Science, pp. 1 - 7, Jul, 2022**

- S. Deshpande, R. Walambe, K. Kotecha, M. Marjanović-Jakovljević, Post-hoc Explainable Reinforcement Learning Using Probabilistic Graphical Models, *Advanced Computing. IACC 2021. Communications in Computer and Information Science*, vol 1528. Springer, pp. 362 - 376, Feb, 2022
- J. Jacques Junior, C. Ozcinar, M. Marjanović-Jakovljević, X. Baró, G. Anbarjafari, S. Escalera, On the effect of age perception biases for real age regression, *14th IEEE International Conference on Automatic Face & Gesture Recognition*, May, 2019. To be published in *Proceedings*, pp. xx - xx, May, 2019
- J. Gorbova, M. Čolović, M. Marjanović-Jakovljević, A. Njeguš, G. Anbarjafari, Going Deeper in Hidden Sadness Recognition Using Spontaneous Database, *MULTIMEDIA TOOLS AND APPLICATIONS*, Vol. 78, No. 16, pp. 23161 - 23178, 2019
- F. Noroozi, M. Marjanović-Jakovljević, A. Njeguš, S. Escalera, G. Anbarjafari, Audio-Visual Emotion Recognition in Video Clips, *IEEE Transactions on Affective Computing*, Vol. PP, No. 1949-3045, pp. 1 - 16, Jun, 2017
- J. Grobova, M. Čolović, M. Marjanović-Jakovljević, A. Njeguš, H. Demirel, A. Gholamreza, Automatic Hidden Sadness Detection Using Micro-Expressions (Proceedings Paper), *12th IEEE International Conference on Automatic Face & Gesture Recognition (FG 2017) - Proceedings Paper - M 23*, pp. 828 - 832, 2017
- F. Noroozi, M. Marjanović-Jakovljević, A. Njeguš, S. Escalera, G. Anbarjafari, A Study of Language and Classifier-independent Feature Analysis for Vocal Emotion Recognition, <https://arxiv.org/abs/1811.08935>, pp. 1 - 20, 2017
- A. Nasef, M. Marjanović-Jakovljević, A. Njeguš, Stochastic gradient descent analysis for the evaluation of a speaker recognition, *ANALOG INTEGRATED CIRCUITS AND SIGNAL PROCESSING*, Vol. 90, No. 2, pp. 389 - 397, Dec, 2016
- M. Marjanović-Jakovljević, A. Njeguš, F. Noroozi, S. Escalera, A. Gholamreza, Fusion of Classifier Predictions for Audio-Visual Emotion Recognition (Proceedings Paper), (m23) *23RD INTERNATIONAL CONFERENCE ON PATTERN RECOGNITION (ICPR)*, (2016), vol. br. , str. 61-66, pp. 61 - 66, 2016
- M. Marjanović-Jakovljević, System Model of TH-UWB Using LDPC Code Implementation, *Journal of Telecommunications*, pp. xx - xx, Aug, 2015
- M. Marjanović-Jakovljević, Sensitivity Analysis of Information Retrieval Metrics, *International Journal of Computer Science and Information Technologies (IJCSIT)*, Vol. 7, No. 4, pp. 45 - 56, Aug, 2015
- M. Marjanović-Jakovljević, Information Retrieval System for Serbian Language: Requirements, Limitations and Experiments, *International Journal of Computer Application (IJCA)*, Vol. 5, No. 5, pp. 22 - 34, Aug, 2015
- M. Marjanović-Jakovljević, Analysis of Timing Offset Estimation Schemes for UWB Signals, *EURASIP 13 th. European Signal. Processing Conference Proceedings*, Vol. 4, pp. 2418 - 2422, 2005

#### Radovi na konferencijama:

- S. Offorjindu, M. Marjanović, T. Bezdán, Effects of Adam Optimizer variants on the Brain Tumor Segmentation Task, May, 2025
- B. Gutić, T. Bezdán, M. Marjanović, P. Watson, H. Farahani, EXPLAINABLE ARTIFICIAL INTELLIGENCE IN DECODING HUMAN EMOTIONS THROUGH VISION TRANSFORMERS, *Sinteza 2024*, pp. 168 - 174, May, 2024
- N. Boskovic, M. Marjanović, CITEZENS' ATTITUDES TOWARDS THE USE OF THE EGOVERNMENT PORTAL (EUPRAVA) IN THE REPUBLIC OF SERBIA, May, 2024
- M. Marjanović, A. Stankovic, CNN Vulnerability On Untargeted Adversarial Attacks, 2024
- A. Stankovic, M. Marjanović, ADVERSARIAL ATTACKS ON MACHINE LEARNING MODELS IN HEALTHCARE APPLICATIONS, 2024

- B. Gutić, T. Bezdan, F. Hojjatollah, P. Watson, M. Marjanović, EXPLAINABLE ARTIFICIAL INTELLIGENCE IN DECODING HUMAN EMOTIONS THROUGH VISION TRANSFORMERS, 2024
- D. Jovanovic, M. Marjanovic, M. Antonijevic, M. Zivkovic, N. Budimirovic, N. Bacanin, Feature Selection by Improved Sand Cat Swarm Optimizer for Intrusion Detection, 2022 International Conference on Artificial Intelligence in Everything (AIE), IEEE, pp. 685 - 690, Aug, 2022
- M. Salb, N. Bacanin, M. Zivkovic, M. Antonijevic, M. Marjanovic, I. Strumberger, Extreme learning machine tuning by original sine cosine algorithm, 2022 IEEE World Conference on Applied Intelligence and Computing (AIC), IEEE, pp. 143 - 148, Jun, 2022
- A. Petrovic, N. Bacanin, M. Zivkovic, M. Marjanovic, M. Antonijevic, I. Strumberger, The AdaBoost Approach Tuned by Firefly Metaheuristics for Fraud Detection, 2022 IEEE World Conference on Applied Intelligence and Computing (AIC), IEEE, pp. 834 - 839, Jun, 2022
- A. Vesic, M. Marjanovic, A. Petrovic, I. Strumberger, E. Tuba, T. Bezdan, Optimizing Extreme Learning Machine by Animal Migration Optimization, 2022 IEEE Zooming Innovation in Consumer Technologies Conference (ZINC), Novi Sad, Serbia, pp. 261 - 266, May, 2022
- D. Čugalj, M. Marjanović-Jakovljević, M. Živković, Prediction of Correct Readings of Car Engine Mass Air Flow Sensors, Sinteza 2021 - International Scientific Conference on Information Technology and Data Related Research, pp. 3 - 8, Jun, 2021
- A. Vesic, A. Micovic, V. Ignjatovic, S. Lakicevic, M. Colovic, M. Zivkovic, M. Marjanovic, Hidden Sadness Detection: Differences between Men and Women, 2021 Zooming Innovation in Consumer Technologies Conference (ZINC), IEEE, pp. 237 - 241, May, 2021
- M. Marjanović-Jakovljević, IEEE Zooming Innovation in Consumer Technologies Conference (ZINC) 2021, Hidden Sadness Detection: Differences between Man and Women, May, 2021
- M. Marjanović-Jakovljević, Post-hoc Explainable Reinforcement Learning Using Probabilistic Graphical Models, 2021
- V. Marković, A. Njeguš, M. Marjanović-Jakovljević, Anomalies Detection in the Application Logs Using Kohonen SOM Machine Learning Algorithm, Proc. of International Scientific Conference on Information Technology and Data related research, pp. 275 - 282, Oct, 2020
- H. Skačev, A. Mićović, B. Gutić, D. Dotlić, A. Vesić, V. Ignjatović, S. Lakićević, M. Marjanović-Jakovljević, M. Živković, On the Development of the Automatic Weed Detection Tool, 2020 Zooming Innovation in Consumer Technologies Conference (ZINC), pp. 123 - 126, May, 2020
- A. Vesić, V. Ignjatović, S. Lakićević, L. Lakićević, B. Gutić, H. Skačev, D. Dotlić, A. Mićović, M. Marjanović-Jakovljević, M. Živković, Predicting Plant Water and Soil Nutrient Requirements, 2020 Zooming Innovation in Consumer Technologies Conference (ZINC), pp. 132 - 137, May, 2020
- M. Marjanović-Jakovljević, C. Ozinar, X. Baró, G. Anbarjafari, S. Escalera, On the effect of age perception biases for real age regression, IEEE (FG 2019), 14th IEEE International Conference on Automatic Face & Gesture Recognition, May, 2019
- M. Krstic, M. Marjanović-Jakovljević, Merenje parametara i testiranje performansi modela OTN mreže, Apr, 2019
- J. Zlatanović, M. Marjanović-Jakovljević, Z. Trivić, Wireless Microphones Interference Decreasing using LTE Filters, 2019
- M. Marjanović-Jakovljević, M. Krstić, The Fifth International Scientific Conference on Information Technology and Data Related Research Sinteza 2018, "Primena TETRA sistema u Vojski Srbije", Apr, 2018

- J. Gorbova, M. Čolović, M. Marjanović-Jakovljević, A. Njeguš, H. Demirel, G. Anbarjafari, Automatic Hidden Sadness Detection Using micro-expressions, Proceedings from the 12th IEEE International Conference on Automatic Face and Gesture Recognition (FG 2017), Washington, DC., pp. 828 - 832, May, 2017
- A. Nasef, M. Marjanović-Jakovljević, A. Njeguš, Optimization of the speaker recognition in noisy environments using a stochastic gradient descent, Proceedings of International Scientific Conference on Information Technology and Data Related Research, pp. 369 - 373, Apr, 2017
- S. Saša, M. Marjanović-Jakovljević, Ekonomski Aspekti Primene 5G Tehnologije, 2017
- F. Noroozi, M. Marjanović-Jakovljević, A. Njeguš, S. Escalera, G. Anbarjafari, Fusion of Classifier Predictions for Audio-Visual Emotion Recognition, Proceedings of 23rd International Conference on Pattern Recognition (ICPR), pp. 61 - 66, Dec, 2016
- A. Njeguš, V. Jovanović, M. Marjanović-Jakovljević, Information Retrieval Evaluation for Tourism related Social Media Content, Proceedings of Singidunum International Tourism Conference - SITCON 2016, pp. 92 - 100, Sep, 2016
- A. Njeguš, M. Marjanović-Jakovljević, G. Anbarjafari, Performance Analysis of Vocal Emotion Recognition Using Selective Speech Features, Proceedings of 3rd International Conference on Electrical, Electronic and Computing Engineering - IcETRAN 2016, pp. 1 - 5, Jun, 2016
- M. Marjanović-Jakovljević, HSI Based Colour Image Equalization Using Iterative nth Root and nth Power, Jun, 2016
- M. Marjanović-Jakovljević, A. Njeguš, Data-Driven Human Activity Recognition in Smart Environments, Apr, 2016
- M. Marjanović-Jakovljević, A. Nasef, Development of an Open Source Based Software Tool for Arabic Text Stemming and Classifications, Apr, 2016
- M. Marjanović-Jakovljević, M. Frantlović, I. Jokic, Intelligent industrial instrumentation based on silicon MEMS pressure sensors, Apr, 2016
- M. Marjanović-Jakovljević, Performance Analysis of Vocal Emotion Recognition Using Selective Speech Features, ICETRAN 2016-Society for Electronics, Telecommunications, Computers, Automatic Control and Nuclear Engineering, 2016
- M. Marjanović-Jakovljević, V. Tomašević, D. Živković, Anti-plagiarism Software: Usage, Effectiveness and Issues, SINTEZA 2015, pp. 119 - 122, 2015
- M. Marjanović, Z. Petrović, Videokonferencija preko Interneta, TELFOR 2002, Belgrade, 2002., 2015
- M. Marjanović-Jakovljević, BER Performance of a TH-UWB System in Different Scenarios using Fast Simulator, SINTEZA 2014, 2014
- M. Marjanović-Jakovljević, A New Approach of MUD in UWB Systems, ICUWB 2006, IEEE International Conference on Ultrawideband, September 2006., 2006
- M. Marjanović-Jakovljević, A Low Complexity Simulation Algorithm for TH-UWB MMSE RAKE Receiver, ISSPIT 2006, The 6th IEEE International Symposium on Signal Processing and Information Technology, Vancouver, Canada, August 2006, 2006
- M. Marjanović-Jakovljević, A Low Complexity Simulation Algorithm for TH-UWB MMSE RAKE Receiver in a NLOS Multipath Channel, 2006
- M. Marjanović, J. Paez Borrillo, Analysis of Timing Offset Estimation Schemes for UWB Signals, Sep, 2005

#### Ostali radovi:

- N. Bacanin, M. Zivkovic, Z. Hajdarevic, S. Janicijevic, A. Dasho, M. Marjanovic, L. Jovanovic, Performance of Sine Cosine Algorithm for ANN Tuning and Training for IoT Security, Chapter in LNNS Lecture Notes in Networks and Systems: HIS 2022: Hybrid Intelligent Systems, Springer, volume 647, LNNS Lecture Notes in Networks

- and Systems: HIS 2022: Hybrid Intelligent Systems, volume 647, pp. 302 - 312, Springer, Cham, May, 2023
- M. Zivkovic, A. Petrovic, N. Bacanin, M. Djuric, A. Vesic, I. Strumberger, M. Marjanovic, Training Logistic Regression Model by Hybridized Multi-verse Optimizer for Spam Email Classification, Chapter in LNNS Lecture Notes in Networks and Systems: ICDSA 2022: Proceedings of International Conference on Data Science and Applications, Springer, volume 552, LNNS Lecture Notes in Networks and Systems: ICDSA 2022: Proceedings of International Conference on Data Science and Applications, volume 552, pp. 507 - 520, Springer, Singapore, Kolkata, India, Feb, 2023
  - M. Gajevic, N. Milutinovic, J. Krstovic, L. Jovanovic, M. Zivkovic, M. Marjanovic, C. Stoean, Artificial Neural Network Tuning by Improved Sine Cosine Algorithm for HealthCare 4.0, Chapter in Advances in Computer Science Research: ICIITB 2022: Proceedings of the 1st International Conference on Innovation in Information Technology and Business, Atlantic Press, Advances in Computer Science Research: ICIITB 2022: Proceedings of the 1st International Conference on Innovation in Information Technology and Business, Atlantic Press, pp. 289 - 305, Atlantic Press, Muscat, Oman, Jan, 2023
  - A. Petrovic, L. Jovanovic, M. Zivkovic, N. Bacanin, N. Budimirovic, M. Marjanovic, Forecasting Bitcoin Price by Tuned Long Short Term Memory Model, Chapter in Advances in Computer Science Research: ICIITB 2022: Proceedings of the 1st International Conference on Innovation in Information Technology and Business, Atlantic Press, Advances in Computer Science Research: ICIITB 2022: Proceedings of the 1st International Conference on Innovation in Information Technology and Business, Atlantic Press, pp. 187 - 202, Atlantic Press, Muscat, Oman, Jan, 2023
  - L. Jovanovic, M. Antonijevic, M. Zivkovic, D. Jovanovic, M. Marjanovic, N. Bacanin, Sine Cosine Algorithm with Tangent Search for Neural Networks Dropout Regularization, Chapter in AIS Algorithms for Intelligent Systems: ICDICI 2022: Data Intelligence and Cognitive Informatics, Springer, AIS Algorithms for Intelligent Systems: ICDICI 2022: Data Intelligence and Cognitive Informatics, pp. 789 - 802, Springer, Singapore, Tirunelveli, India, Dec, 2022