

# MILOŠ DOBROJEVIĆ

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**Knjige:**

- **M. Dobrojević, Veb informacioni sistemi, Univerzitet Singidunum, Beograd, 2024**
- **M. Dobrojević, N. Bačanin-Džakula, Veb programiranje, Univerzitet Singidunum, Beograd, 2021**
- **M. Dobrojević, Kako napraviti web aplikaciju? PHP, MySQL, JavaScript, magma.rs, 2016**

**Radovi u časopisima:**

- **V. Radojčić, N. Bačanin, L. Jovanović, M. Dobrojević, V. Simić, D. Pamučar, M. Živković, J. Kaljević, A two-layer TinyML approach aided by metaheuristics optimization for leveraging agriculture 4.0 and plant disease classification, Applied Soft Computing, No. 114179, Nov, 2025**
- **A. Jovanović, N. Bačanin, L. Jovanović, R. Damaševičius, M. Antonijević, M. Živković, J. Kaljević, M. Dobrojević, Performance evaluation of metaheuristics-tuned recurrent networks with VMD decomposition for Amazon sales prediction, International Journal of Data Science and Analytics, pp. 1 - 19, Nov, 2024**
- **M. Dobrojević, L. Jovanović, L. Babić, M. Čajić, T. Živković, M. Živković, S. Muthusamy, M. Antonijević, N. Bačanin, Cyberbullying Sexism Harassment Identification by Metaheuristics-Tuned eXtreme Gradient Boosting, CMC-Computers, Materials & Continua, Vol. 80, No. 3, pp. 4997 - 5027, Sep, 2024**

- L. Jovanovic, M. Zivkovic, N. Bacanin, M. Dobrojevic, V. Simic, K. Sadasivuni, E. Tirkolaee, Evaluating the performance of metaheuristic-tuned weight agnostic neural networks for crop yield prediction, *NEURAL COMPUTING AND APPLICATIONS*, May, 2024
- N. Bacanin, L. Jovanovic, R. Stoean, C. Stoean, M. Zivkovic, M. Antonijevic, M. Dobrojevic, Respiratory Condition Detection Using Audio Analysis and Convolutional Neural Networks Optimized by Modified Metaheuristics, *Axioms*, Vol. 13, No. 5:335, pp. 1 - 31, May, 2024
- L. Jovanovic, M. Antonijevic, M. Zivkovic, M. Dobrojevic, M. Salb, I. Strumberger, N. Bacanin, Long short-term memory tuning by enhanced Harris hawks optimization algorithm for crude oil price forecasting, *ADVANCES IN COMPUTERS*, pp. 1 - 40, Feb, 2024
- A. Minic, L. Jovanovic, N. Bacanin, C. Stoean, M. Zivkovic, P. Spalevic, A. Petrovic, M. Dobrojevic, R. Stoean, Applying Recurrent Neural Networks for Anomaly Detection in Electrocardiogram Sensor Data, *SENSORS*, Vol. 23, No. 24:9878, pp. 1 - 18, Dec, 2023
- B. Predic, L. Jovanovic, V. Simic, N. Bacanin, M. Zivkovic, P. Spalevic, N. Budimirovic, M. Dobrojevic, Cloud-load forecasting via decomposition-aided attention recurrent neural network tuned by modified particle swarm optimization, *Complex & Intelligent Systems*, pp. 1 - 21, Nov, 2023
- M. Dobrojevic, M. Zivkovic, A. Chhabra, N. S. Sani, N. Bacanin, M. Mohd Amin, Addressing Internet of Things security by enhanced sine cosine metaheuristics tuned hybrid machine learning model and results interpretation based on SHAP approach, *PeerJ Computer Science*, No. 9:e1405, pp. 1 - 47, Jun, 2023
- J. Todorović, B. Jakšić, P. Spalević, M. Dobrojević, I. Milovanović, Performance analysis of WSN–FSO system modeled by Gamma–Chi-square channel distribution, *Proceedings of the Estonian Academy of Sciences*, Vol. 72, No. 1, 2023, pp. 30 - 40, Jan, 2023
- Milos Dobrojevic, Nebojsa Bacanin, IoT as a Backbone of Intelligent Homestead Automation, *ELECTRONICS*, Vol. 11, No. 7, pp. 1004 - 1004, Mar, 2022
- E. Šakrak, M. Dobrojević, Prototip sistema za rano upozoravanje na bujične poplave u brdsko-planinskim predelima zasnovan na internetu stvari, *Bezbednost*, Vol. 63, No. 1, pp. 98 - 114, 2021
- E. Šakrak, M. Dobrojević, S. Sedmak, IoT Based Early Warning System for Torrential Floods, *FME Transactions*, Vol. 48, No. 3, pp. 511 - 516, 2020

- M. Dobrojević, Importance of usage of ERP software and data mining techniques for crime prevention in fleet management, *Bezbednost*, Vol. 59, No. 3, pp. 79 - 100, 2017
- M. Dobrojević, M. Rakin, B. Međo, S. Omić, A. Sedmak, Internet application for project management in industrial systems, *Istraživanja i projektovanja za privredu*, Vol. 8, No. 2, pp. 73 - 82, 2010
- M. Rakin, N. Gubelj, M. Dobrojević, A. Sedmak, Modelling of ductile fracture initiation in strength mismatched welded joint, *ENGINEERING FRACTURE MECHANICS*, Vol. 75, No. 11, pp. 3499 - 3510, Jul, 2008
- M. Rakin, B. Međo, N. Gubelj, M. Dobrojević, I. Cvijović-Alagić, A. Sedmak, Ductile crack growth initiation in welded joints - Micromechanical approach, *Welding in the World*, Vol. 52, No. Special Issue, pp. 297 - 302, 2008
- M. Dobrojević, M. Rakin, N. Gubelj, I. Cvijović, M. Zrilić, A. Sedmak, Micromechanical analysis of constraint effect on fracture initiation in strength mismatched welded joints, *MATERIALS SCIENCE FORUM*, Vol. 555, pp. 571 - 576, Sep, 2007
- M. Dobrojević, A. Sedmak, E. Argob, O. Popović, Effects of Geometry and Material Heterogeneity Properties to Behaviour of Charpy Specimen, *STRUCTURAL INTEGRITY AND LIFE*, Vol. 3, No. 2, pp. 73 - 83, 2003

#### Radovi na konferencijama:

- M. Zivkovic, L. Jovanovic, M. Pavlov, N. Bacanin, M. Dobrojevic, M. Salb, Optimized recurrent neural networks with attention for wind farm energy generation forecasting, 2023 16th International Conference on Advanced Technologies, Systems and Services in Telecommunications (TELSIKS), IEEE, Nis, Serbia, pp. 187 - 190, Oct, 2023
- A. Jovanovic, T. Dogandzic, M. Dobrojevic, M. Sarac, N. Bacanin, M. Zivkovic, Gold Prices Forecasting Using Recurrent Neural Network with Attention Tuned by Metaheuristics, 2023 IEEE World Conference on Applied Intelligence and Computing (AIC), Sonbhadra, India, pp. 345 - 350, Jul, 2023
- V. Radojčić, A. Cvetković, M. Dobrojević, The use of Computer Vision in precision agriculture, Proceedings of the International Scientific Conference - Sinteza 2023, pp. 60 - 65, 2023

- V. Radojčić, A. Cvetković, M. Dobrojević, P. Spalević, Artificial Intelligence is the key to success in practical application, Zbornik radova Univerziteta Sinergija, pp. 16 - 20, Nov, 2022
- Miloš Dobrojević, Prototype Of Autonomous Water Management System In Mountainous Homestead, Book Of Proceedings International Scientific Conference On Information Technology And Data Related Research, pp. 199 - 204, Apr, 2022
- M. Dobrojević, European Green Deal: Serbian Path towards Renewable Energy, Proceedings of the 7th Virtual International Conference on Science, Technology and Management in Energy, pp. 285 - 292, Dec, 2021
- M. Dobrojević, Impact of COVID-19 pandemic on higher education, Sinergija 2020 XXI Naučni skup sa međunarodnim učešćem - zbornik radova, pp. 42 - 45, Dec, 2020
- E. Šakrak, M. Dobrojević, Prototype of a micro monitoring station with remote torrential flood alerts, Book of proceedings, International Scientific Conference on Information Technology and Data Related Research, pp. 188 - 192, Oct, 2020
- M. Dobrojević, Prepping for the Future: Reinvention of the Education System, Proceedings of the 1st Virtual International Conference Path to a Knowledge Society - Managing Risks and Innovation, pp. 71 - 76, Dec, 2019
- I. Božić, M. Dobrojević, J. Pršić, Privatization Of Banks In Serbia And New Generation Banking Products, International Scientific Conference Digitization and smart financial reporting, Book of Proceedings, Singidunum University, pp. 37 - 42, Dec, 2019
- M. Stanišić, M. Dobrojević, M. Milojević, Financial Transaction Monitoring Software Tool In The University Business Environment, International Scientific Conference Digitization and smart financial reporting, Book of Proceedings, Singidunum University, pp. 3 - 8, Dec, 2019
- M. Dobrojević, Obrazovanje 4.0: U korak sa industrijskom revolucijom, Sinergija 2019 - Sinergija formalnog i neformalnog obrazovanja i njen uticaj na socio-ekonomski položaj mladih, XX Međunarodni naučni skup, Univerzitet Sinergija, Bijeljina, pp. 71 - 75, Nov, 2019
- M. Dobrojević, Unapređenje procesa upravljanja voznim parkom komunalnih preduzeća primenom web baziranih informacionih sistema, Lokalne zajednice i mogućnost unapređenja njihovog funkcionisanja, XIX Međunarodni naučni skup, Zbornik radova, pp. 46 - 51, Nov, 2018

- M. Dobrojević, T. Golubović, Optimization of e-Commerce search engine with approximate string matching technique, 7th International Symposium on Industrial Engineering Proceedings, pp. 116 - 121, Sep, 2018
- M. Dobrojević, Acceleration of Web Content and Page Structure Management using Shortcode, Book of Proceedings of the International Scientific Conference on Information Technology and Data Related Research, pp. 61 - 67, 2018
- M. Dobrojević, Performance improvement of eCommerce System based on "Oxid eSales" Framework, XVIII međunarodni naučni skup "Poslovni aspekti mobilnog računarstva", Univerzitet Sinergija, pp. 59 - 63, Dec, 2017
- D. Jovanović, M. Dobrojević, Optimizacija upravljanja flotom primenom GPS i veb tehnologija, Zbornik radova XVIII međunarodni naučni skup "Poslovni aspekti mobilnog računarstva", Univerzitet Sinergija, pp. 1 - 5, Dec, 2017
- M. Dobrojević, M. Zoroja, Magma CMS™: Enhancement of Content Management Productivity, International Economics and Management Conference ECIN 2017, pp. 83 - 89, Dec, 2017
- M. Dopsaj, N. Babić, N. Ćopić, M. Dobrojević, Running Velocity Assessment Score (rvas) At 13 To 14 Yrs Football Players: Multidimensional Modelling Method, 25th International Congress of Physical Education and Sport Science, May, 2017
- S. Milovanović, M. Dobrojević, Brzi razvoj hibridne aplikacije za ugostiteljstvo primjenom jQuery i Apache Cordova frejmworka, Međunarodni naučni skup Sinergija "Uloga i značaj turizma u privrednom rastu i razvoju Republike Srpske i BiH", pp. 78 - 83, Dec, 2016
- M. Vulović, M. Dobrojević, A. Vuković, Web application for electricity meter reading, ECIN 2106: International Economics and Management Conference, pp. 83 - 88, Sep, 2016
- M. Dobrojević, S. Cvetković, Cost-effective e-government solution for the municipalities in bosnia and herzegovina, International Economics and Management Conference ECIN 2016, pp. 31 - 36, Sep, 2016
- S. Cvetković, M. Dobrojević, Predlog e-government rešenja za matične urede u BiH, Zbornik radova XVI Međunarodni naučni skup "Informatička ekonomija, izazovi i šanse za budući razvoj Republike Srpske" Univerzitet Sinergija, pp. 36 - 40, Nov, 2015

- **M. Dobrojević, Fleet Maintenance: Use of Data Mining and Statistics in Fraud Prevention, Sinergija 2014: Privredni kriminalitet i savremeno poslovanje, pp. 219 - 222, Dec, 2014**
- **M. Dobrojević, Magma fleet manager v2.0, Zbornik radova XIV Međunarodni naučni skup Sinergija 2013, pp. 263 - 268, Dec, 2013**
- **M. Rakin, N. Gubeljak, M. Dobrojević, B. Međo, A. Sedmak, Modelling of ductile crack growth in welded joints using micromechanical failure criterion, Proceedings of the 17th European Conference on Fracture 2008: Multilevel Approach to Fracture of Materials, Components and Structures, pp. 2473 - 2480, Sep, 2008**

#### **Ostali radovi:**

- **V. Radojic, M. Dobrojevic, L. Jovanovic, M. Zivkovic, M. Mihajlovic, N. Bacanin, A Computer Vision-Based Approach Optimized by Modified Metaheuristic for Precise Agriculture Applications, Chapter in AIS Algorithms for Intelligent Systems: ICEAI 2024: Evolutionary Artificial Intelligence, Springer, AIS Algorithms for Intelligent Systems: ICEAI 2024: Proceedings of International Conference on Evolutionary Artificial Intelligence, pp. 635 - 647, Springer, Singapore, Malaysia, Jul, 2025**
- **T. Zivkovic, M. Zivkovic, L. Jovanovic, J. Kaljevic, M. Dobrojevic, N. Bacanin, YOLOv8 Model Architecture Selection for Human Fall Detection, Chapter in LNNS Lecture Notes in Networks and Systems: ICDAM 2024: International Conference on Data Analytics & Management, Springer, volume 1301, LNNS Lecture Notes in Networks and Systems: ICDAM 2024: Proceedings of Data Analytics and Management, volume 1301, pp. 219 - 227, Springer, Singapore, London, UK, May, 2025**
- **B. Radomirovic, L. Jovanovic, N. Budimirovic, M. Zivkovic, N. Bacanin, M. Dobrojevic, Augmentation and Substitution of Medical Training Data with Generative Adversarial Networks for Machine Learning, Chapter in CCIS Communications in Computer and Information Science: MDIS 2024: Modelling and Development of Intelligent Systems, Springer, volume 2486, CCIS Communications in Computer and Information Science: MDIS 2024: Proceedings of International Conference on Modelling and Development of Intelligent Systems, volume 2486, pp. 138 - 152, Springer, Cham, Sibiu, Romania, May, 2025**
- **L. Jovanovic, V. Radojic, M. Dobrojevic, M. Cajic, M. Zivkovic, N. Bacanin, Hybrid CNN and XGBoost Model Tuned by Metaheuristics for DC Motor Failure Prediction Using**

**Mel Spectrograms, Chapter in SST Studies in Smart Technologies: WCSC 2024: World Congress on Smart Computing, Springer, SST Studies in Smart Technologies: WCSC 2024: Proceedings of World Congress on Smart Computing, Springer, pp. 1 - 16, Springer, Singapore, Lucknow, India, Apr, 2025**

- **A. Tasic, L. Jovanovic, M. Popovic, N. Bacanin, M. Zivkovic, M. Dobrojevic, Waste classification using convolutional neural networks tuned by modified metaheuristics algorithm, Chapter in Harnessing Automation and Machine Learning for Resource Recovery and Value Creation, pp. 237 - 261, Elsevier, Apr, 2025**
- **N. Bacanin, L. Jovanovic, M. Dobrojevic, M. Zivkovic, M. Antonijevic, M. Salb, Exploring the Potential of Modified Metaheuristic Optimized Long Short-term Memory Neural Networks for Earthquake Magnitude Forecasting, Chapter in Multi-objective Optimization Techniques, 1st Edition, pp. 99 - 118, CRC Press, Boca Raton, Feb, 2025**
- **L. Jovanovic, N. Bacanin, R. Ravikumar, M. Antonijevic, M. Dobrojevic, M. Zivkovic, Tuning Natural Language Processing by Altered Metaheuristics Algorithm for Phishing Email Identification, Chapter in LNNS Lecture Notes in Networks and Systems: CML 2024: International Conference on Computing and Machine Learning, Springer, volume 1144, LNNS Lecture Notes in Networks and Systems: CML 2024: Proceedings of International Conference on Computing and Machine Learning, volume 1144, pp. 265 - 282, Springer, Singapore, Sikkim, India, Jan, 2025**
- **L. Jovanovic, A. Bozovic, N. Bacanin, V. Radojic, M. Zivkovic, M. Dobrojevic, Audio Analysis Optimized by Modified Metaheuristic for Motor Predictive Maintenance, Chapter in AIS Algorithms for Intelligent Systems: CVR 2024: Computer Vision and Robotics, Springer, AIS Algorithms for Intelligent Systems: CVR 2024: Proceedings of Computer Vision and Robotics, pp. 127 - 140, Springer, Singapore, Pune, India, Nov, 2024**
- **N. Bacanin, L. Jovanovic, M. Zivkovic, T. Zivkovic, P. Bisevac, M. Dobrojevic, M. Sarac, M. Antonijevic, Parkinson's Disease Detection with Deep Long Short-term Memory Networks Optimized by Modified Metaheuristic Algorithm, Chapter in Collective Intelligence, 1st Edition, pp. 204 - 229, CRC Press, Boca Raton, Nov, 2024**
- **N. Bacanin, M. Kabiljo, L. Babic, V. Gajic, J. Kaljevic, M. Dobrojevic, Online harassment detection on online data science platforms optimized by metaheuristic, Proceedings of the 2nd International Conference on Innovation in Information Technology and Business (ICIITB 2024), Chapter in Advances in Computer Science Research, pp. 121 - 136, Atlantis Press, Muscat, Oman, Aug, 2024**

- **M. Protic, L. Jovanovic, M. Dobrojevic, M. Cajic, M. Zivkovic, H. Shaker, N. Bacanin, Signals Intelligence Based Drone Detection Using YOLOv8 Models, Proceedings of the 2nd International Conference on Innovation in Information Technology and Business (ICIITB 2024), Chapter in Advances in Computer Science Research, pp. 74 - 86, Atlantis Press, Muscat, Oman, Aug, 2024**
- **A. Toskovic, A. Petrovic, L. Jovanovic, N. Bacanin, M. Zivkovic, M. Dobrojevic, Marine Vessel Trajectory Forecasting Using Long Short-Term Memory Neural Networks Optimized via Modified Metaheuristic Algorithm, Chapter in AIS Algorithms for Intelligent Systems: ICTSM 2023: Trends in Sustainable Computing and Machine Intelligence, Springer, AIS Algorithms for Intelligent Systems: ICTSM 2023: Trends in Sustainable Computing and Machine Intelligence, pp. 51 - 66, Springer, Singapore, Bangkok, Thailand, Mar, 2024**
- **M. Zivkovic, L. Jovanovic, N. Bacanin, A. Petrovic, N. Savanovic, M. Dobrojevic, XGBoost Tuned by Hybridized SCA Metaheuristics for Intrusion Detection in Healthcare 4.0 IoT Systems, Chapter in AIS Algorithms for Intelligent Systems: ICEAI 2023: Evolutionary Artificial Intelligence, Springer, AIS Algorithms for Intelligent Systems: ICEAI 2023: Evolutionary Artificial Intelligence, pp. 1 - 16, Springer, Singapore, Malaysia, Mar, 2024**
- **L. Jovanovic, M. Gajevic, M. Dobrojevic, N. Budimirovic, N. Bacanin, M. Zivkovic, Tackling IoT Security Challenge by Metaheuristics Tuned Extreme Learning Machine, Chapter in LNNS Lecture Notes in Networks and Systems: ICoISS 2023: International Conference on Intelligent Sustainable Systems, Springer, volume 665, LNNS Lecture Notes in Networks and Systems: ICoISS 2023: International Conference on Intelligent Sustainable Systems, volume 665, pp. 507 - 522, Springer, Singapore, Tamil Nadu, India, Jun, 2023**
- **M. Dobrojević, B. Međo, M. Rakin, A. Sedmak, Project management software for distributed industrial companies, Innovations in Computing Sciences and Software Engineering, pp. 221 - 226, Springer, Nov, 2010**