

## Lista de lucrări

### a) Lista celor maximum 10 lucrări considerate de candidat a fi cele mai relevante pentru domeniul disciplinelor postului

- [1] F. T. Avram, D.-I. Țarcă, **D. Noje**, T. Vesselenyi, and R. Țarcă, “Surface Roughness Determination With the Help of Artificial Neural Networks as Enabler of Metal Machining Process Controlling System,” *Int. J. Comput. Commun. Control*, vol. 20, no. 2, Mar. 2025, doi: 10.15837/ijccc.2025.2.7028.
- [2] V. O. Mihalca, O. Moldovan, I. Țarcă, D. Anton, and **D. Noje**, “Integrating deep learning in target tracking applications, as enabler of control systems,” *Int. J. Comput. Commun. CONTROL*, vol. 19, no. 6, Nov. 2024, doi: 10.15837/ijccc.2024.6.6854.
- [3] **D. C. Noje**, O.-G. Moldovan, O. C. Novac, M. C. Novac, and R.-C. Țarcă, “Flexible system architecture used to collect and store signals acquired by IoT devices,” in 2024 16th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Iasi, Romania: IEEE, Jun. 2024, pp. 1–5. doi: 10.1109/ECAI61503.2024.10607406.
- [4] **D.C. Noje**, O.-G. Moldovan, D.-I. Țarcă, and R.-C. Țarcă, “Image Processing Using Shepard Local Approximation Operators Defined in Riesz MV-Algebras,” in 2024 10th International Conference on Mechatronics and Robotics Engineering (ICMRE), Milan, Italy: IEEE, Feb. 2024, pp. 260–264. doi: 10.1109/ICMRE60776.2024.10532201.
- [5] **D. Noje**, R. C. Tarca, N. Pop, A. O. Moldovan, and O. G. Moldovan, “Automatic System Based on Riesz MV-algebras, for Predictive Maintenance of Bearings of Industrial Equipment Using Temperature Sensors,” in *Intelligent Methods Systems and Applications in Computing, Communications and Control*, vol. 1435, S. Dzitac, D. Dzitac, F. G. Filip, J. Kacprzyk, M.-J. Manolescu, and H. Oros, Eds., in *Advances in Intelligent Systems and Computing*, vol. 1435. , Cham: Springer International Publishing, 2023, pp. 3–19. doi: 10.1007/978-3-031-16684-6\_1.
- [6] K. Khuwaja, A. Aliza, N. Mukhtiar, R. Tarcă, **D. Noje**, M. Juman, and B. Ali, “Sustainable Agriculture: An IoT-Based Solution for Early Disease Detection in Greenhouses,” in 2023 17th International Conference on Engineering of Modern Electric Systems (EMES), Oradea, Romania: IEEE, Jun. 2023, pp. 1–4. doi: 10.1109/EMES58375.2023.10171676.
- [7] O. G. Moldovan, R. V. Ghincu, A. O. Moldovan, **D. Noje**, and R. C. Tarca, “Fault Detection in Three-phase Induction Motor based on Data Acquisition and ANN based Data Processing,” *Int. J. Comput. Commun. Control*, vol. 17, no. 3, Art. no. 3, Apr. 2022, doi: 10.15837/ijccc.2022.3.4788.
- [8] **D. Noje**, I. Dzitac, N. Pop, and R. Tarca, “IoT Devices Signals Processing Based on Shepard Local Approximation Operators Defined in Riesz MV-Algebras,” *Informatica*, pp. 131–142, 2020, doi: 10.15388/20-INFOR395.

[9] **D. Noje**, R. Tarca, I. Dzitac, and N. Pop, “IoT Devices Signals Processing based on Multi-dimensional Shepard Local Approximation Operators in Riesz MV-algebras,” *Int. J. Comput. Commun. Control*, vol. 14, no. 1, Art. no. 1, Feb. 2019, doi: 10.15837/ijccc.2019.1.3490.

[10] **D. Noje** and B. Bede, “Vectorial MV-algebras,” *Soft Comput. - Fusion Found. Methodol. Appl.*, vol. 7, no. 4, pp. 258–262, Feb. 2003, doi: 10.1007/s00500-002-0197-3.

## **b) Teza sau tezele de doctorat**

Sistem automat ce utilizează AI pentru gestionarea semnalelor transmise de dispozitive de tip IoT - Teză condusă în cotutelă de Prof. Univ. Dr. Ing. Radu Cătălin Țarcă – Universitatea din Oradea și Prof Univ. Dr. Nicolae Pop, Institutul de Mecanica Solidelor al Academiei Romane Bucuresti.

## **c) Brevete de invenție și alte titluri de proprietate industrială**

-

## **d) Cărți și capitole în cărți**

### ***Cărți***

[1] **Noje Dan-Cătălin**, Sistem automat ce utilizează AI pentru gestionarea semnalelor transmise de dispozitive de tip IoT, Editura Universității din Oradea, 2025, ISBN 978-606-10-2329-5, 185pag.

[2] Moldovan Octavian Alin, Țarcă Radu Cătălin, **Noje Dan**, Moldovan Ovidiu Gheorghe, Utilizarea sistemelor multisenzoriale în mentenanța predictivă a celulelor de fabricație flexibilă, Editura Universității din Oradea, 2022, ISBN 978-606-10-2185-7, 296 pag.

[3] Alina Alb Lupas, Victor Kos, Horea Oros, **Dan Noje**, Utilizarea PC-urilor: ghid pentru incepatori, Editura Universității din Oradea, 2006, ISBN: 978-973-759-050-3 145 pag.

[4] **D. Noje**, H. Oros, Programarea în limbajul C++, Editura Universității din Oradea, 2004, ISBN 973-613-554-3, 476 pag.

[5] C. Popescu, I. Mang, **D. Noje**, H. Oros, Programarea în limbajul C, Editura Universității din Oradea, 2002, ISBN: 973-613-202-1, 320 pag.

[6] C. Popescu, **D. Noje**, Introducere în informatică, Editura Universității din Oradea, 1999, ISBN: 973-941-667-5, 139 pag.

[7] Moldovan Ovidiu Gheorghe, Țarcă Radu Cătălin, **Noje Dan**, Senzori și sisteme senzoriale, Îndrumar de laborator (online), ED. II, 2023, 102 pag.

### **Capitole de cărți**

- [1] **D. Noje** and R. Tarca, “Applications of Digital Twins in the Development of a Predictive Maintenance System,” in *Integration of Heterogeneous Manufacturing Machinery in Cells and Systems*, 1st ed., Boca Raton: CRC Press, 2024, pp. 113–125. doi: 10.1201/9781003376620-12.
- [2] **D. Noje**, R. C. Tarca, N. Pop, A. O. Moldovan, and O. G. Moldovan, “Automatic System Based on Riesz MV-algebras, for Predictive Maintenance of Bearings of Industrial Equipment Using Temperature Sensors,” in *Intelligent Methods Systems and Applications in Computing, Communications and Control*, vol. 1435, S. Dzitac, D. Dzitac, F. G. Filip, J. Kacprzyk, M.-J. Manolescu, and H. Oros, Eds., in *Advances in Intelligent Systems and Computing*, vol. 1435. , Cham: Springer International Publishing, 2023, pp. 3–19. doi: 10.1007/978-3-031-16684-6\_1.

### **e) Articole/studii in extenso, publicate în reviste din fluxul științific internațional principal**

- [1] F. T. Avram, D.-I. Țarcă, **D. Noje**, T. Vesselenyi, and R. Țarcă, “Surface Roughness Determination With the Help of Artificial Neural Networks as Enabler of Metal Machining Process Controlling System,” *Int. J. Comput. Commun. Control*, vol. 20, no. 2, Mar. 2025, doi: 10.15837/ijccc.2025.2.7028.
- [2] V. O. Mihalca, O. Moldovan, I. Țarcă, D. Anton, and **D. Noje**, “Integrating deep learning in target tracking applications, as enabler of control systems,” *Int. J. Comput. Commun. Control*, vol. 19, no. 6, Nov. 2024, doi: 10.15837/ijccc.2024.6.6854.
- [3] O. G. Moldovan, R. V. Ghincu, A. O. Moldovan, **D. Noje**, and R. C. Tarca, “Fault Detection in Three-phase Induction Motor based on Data Acquisition and ANN based Data Processing,” *Int. J. Comput. Commun. Control*, vol. 17, no. 3, Art. no. 3, Apr. 2022, doi: 10.15837/ijccc.2022.3.4788.
- [4] **D. Noje**, I. Dzitac, N. Pop, and R. Tarca, “IoT Devices Signals Processing Based on Shepard Local Approximation Operators Defined in Riesz MV-Algebras,” *Informatica*, pp. 131–142, 2020, doi: 10.15388/20-INFOR395.
- [5] **D. Noje**, R. Tarca, I. Dzitac, and N. Pop, “IoT Devices Signals Processing based on Multi-dimensional Shepard Local Approximation Operators in Riesz MV-algebras,” *Int. J. Comput. Commun. Control*, vol. 14, no. 1, Art. no. 1, Feb. 2019, doi: 10.15837/ijccc.2019.1.3490.
- [6] **D. Noje** and B. Bede, “Vectorial MV-algebras,” *Soft Comput. - Fusion Found. Methodol. Appl.*, vol. 7, no. 4, pp. 258–262, Feb. 2003, doi: 10.1007/s00500-002-0197-3.

### **f) Publicații in extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate**

- [1] **D.C. Noje**, O.-G. Moldovan, O. C. Novac, M. C. Novac, and R.-C. Țarcă, “Flexible system architecture used to collect and store signals acquired by IoT devices,” in 2024 16th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Iasi, Romania: IEEE, Jun. 2024, pp. 1–5. doi: 10.1109/ECAI61503.2024.10607406.
- [2] **D.C. Noje**, O.-G. Moldovan, D.-I. Țarcă, and R.-C. Țarcă, “Image Processing Using Shepard Local Approximation Operators Defined in Riesz MV-Algebras,” in 2024 10th International Conference on Mechatronics and Robotics Engineering (ICMRE), Milan, Italy: IEEE, Feb. 2024, pp. 260–264. doi: 10.1109/ICMRE60776.2024.10532201.
- [3] K. Khuwaja, A. Aliza, N. Mukhtiar, R. Tarcă, **D. Noje**, M. Juman, and B. Ali, “Sustainable Agriculture: An IoT-Based Solution for Early Disease Detection in Greenhouses,” in 2023 17th International Conference on Engineering of Modern Electric Systems (EMES), Oradea, Romania: IEEE, Jun. 2023, pp. 1–4. doi: 10.1109/EMES58375.2023.10171676.
- [4] A. Bencsik, B. Bede, **D. Noje**, H. Nobuhara, and K. Hirota, “Max product exponential approximation operators,” in 2006 IEEE International Symposium on Industrial Electronics, Montreal, Que.: IEEE, Jul. 2006, pp. 542–547. doi: 10.1109/ISIE.2006.295516.
- [5] C. Popescu, **D. Noje**, B. Bede, and I. Mang, “A group signature scheme with revocation,” in Proceedings EC-VIP-MC 2003. 4th EURASIP Conference focused on Video/Image Processing and Multimedia Communications (IEEE Cat. No.03EX667), Zagreb, Croatia: Faculty of Electrical Eng. & Comput, 2003, pp. 245–250. doi: 10.1109/VIPMC.2003.1220469.

### **g) Alte lucrări și contribuții științifice sau, după caz, din domeniul creației artistice**

#### *Lucrari în extensor publicate în jurnale*

- [1] **D. Noje**, O. G. Moldovan, L. S. Csokmai, and A. D. Melinte, “Development of an IoT device using MLX90640 sensors for temperature acquisition,” *Nonconv. Technol. Rev.*, vol. 26, no. 4, Art. no. 4, 2022.
- [2] **D. Noje**, A. Cărbaban, O. G. Moldovan, O. A. Moldovan, and D. Crăciun, “Development of DS18B20 temperature sensor IoT device using secure API connection,” *Nonconv. Technol. Rev.*, vol. 26, no. 3, Art. no. 3, 2022.
- [3] E. Laslo, V. Ion, and **D. Noje**, “A method to estimate the methane generation rate constant (K) and the potential methane generation capacity(L0) of municipal landfills located in western Romania,” *Nonconv. Technol. Rev.*, vol. 18, no. 1, pp. 7–11, 2014.
- [4] **D. Noje** and M. Todor, “BL-algebra structure of RGB model,” *Stud. Univ. Babes-Bolyai Inform.*, vol. XLVII, no. 1, Art. no. 1, 2002.
- [5] **D. Noje** and B. Bede, “The MV-algebra structure of RGB model,” *Stud. Univ. Babes-Bolyai Inform.*, vol. XLVI, no. 1, Art. no. 1, 2001.

### *Lucrări în extensor publicate în proceedings-urile unor conferințe internaționale*

- [1] **D. Noje** and D. Dumitrescu, “On DMV-algebras and Product MV-algebras,” presented at the Second Romanian-Hungarian Joint Symposium on Applied Computational Intelligence, 2005, pp. 467–477.
- [2] D. Dumitrescu and **D. Noje**, “Fuzzy connectives, residuated lattices and BL-algebras,” presented at the Second Romanian-Hungarian Joint Symposium on Applied Computational Intelligence, 2005, pp. 183–200.
- [3] A. Bica, **Noje Dan**, and M. Pop, “Applying on algorithm for a new numerical method to approximate the coefficients of a blood-glucose homeostasy mathematical model,” presented at the First East European Conference on Health Care Modelling and Computation, 2005, pp. 34–44.
- [4] **D. Noje**, “Compresion and decompression of fuzzy relations in the BL-algebra over RGB model,” in Proceedings of International Conference on Computers and Comunications, 2004, pp. 290–294.
- [5] **D. Noje**, B. Bede, and V. Kos, “Image contrast modifiers using vectorial MV-algebras,” in Proceedings of the 11th Conference on Applied and Industrial Mathematics, 2003, pp. 32–35.
- [6] E. Laslo and **D. Noje**, “Linear viral operator,” in Proceedings of the Symposium “Colocviul Academic Clujean de Informatică,” 2003, pp. 143–147.
- [7] E. Laslo and **D. Noje**, “Gene viral operator,” in Proceedings of the Symposium “Colocviul Academic Clujean de Informatică,” 2003, pp. 148–152.
- [8] E. Laslo and **D. Noje**, “Amorphous viral operator,” in Proceedings of the 11th Conference on Applied and Industrial Mathematics, 2003, pp. 24–27.
- [9] D. Dumitrescu and **D. Noje**, “Double Product MV-algebras versus Product MV-algebras,” in Proceedings of the 11th Conference on Applied and Industrial Mathematics, 2003, pp. 78–82.
- [10] **D. Noje**, “Using Bernstein Polynomials for image zooming,” in Proceedings of the Symposium “Zilele Academice Clujene”, Computer Science Section, 2002, pp. 99–102.

### *Abstracte lucrari publicate în jurnale*

- [1] **D. Noje**, Tomulescu Ioana Mihaela, E. Laslo, and C. T. Pusta, “Specific features of dermatoglyphics problems in different diseases,” presented at the European Human Genetics Conference 2007, Nice, France: European Journal Of Human Genetics, Jun. 2007, p. 311. [Online]. Available: <https://www.eshg.org/fileadmin/www.eshg.org/abstracts/ESHG2007Abstracts.pdf>
- [2] E. Laslo, **D. Noje**, Tomulescu Ioana Mihaela, and C. T. Pusta, “Genetic algorithms in anthropological pattern recognition,” presented at the European Human Genetics Conference 2007, Nice, France: European Journal Of Human Genetics, Jun. 2007, p. 313. [Online]. Available: <https://www.eshg.org/fileadmin/www.eshg.org/abstracts/ESHG2007Abstracts.pdf>

### *Lucrări comunicate la conferințe internaționale*

- [1] I. M. Tomulescu, C. T. Pusta, E. Laslo, and **D. Noje**, “The importance of digit ratio studies in forensic and populational genetics,” presented at the 5th ISABS (International Society for Applied Biological Sciences) Conference in Forensic Genetics and Molecular Anthropology, Split, Croatia, Sep. 2007, p. 170. [Online]. Available: [https://isabs.hr/publications/5th\\_conference\\_Book\\_of\\_Abstracts.pdf](https://isabs.hr/publications/5th_conference_Book_of_Abstracts.pdf)
- [2] E. Laslo, **D. Noje**, I. M. Tomulescu, and C. T. Pusta, “Artificial intelligence applied in anthropological database search,” presented at the 5th ISABS (International Society for Applied Biological Sciences) Conference in Forensic Genetics and Molecular Anthropology, Split, Croatia, Sep. 2007, p. 157. [Online]. Available: [https://isabs.hr/publications/5th\\_conference\\_Book\\_of\\_Abstracts.pdf](https://isabs.hr/publications/5th_conference_Book_of_Abstracts.pdf)
- [3] Tomulescu Ioana Mihaela, C. T. Pusta, E. Laslo, and **D. Noje**, “Preliminary study about some features of dermatoglyphics in a delinquent population,” presented at the 15th Congress of European Anthropological Association, Budapest, Sep. 2006. [Online]. Available: <http://eaa2006.elte.hu/program.htm>
- [4] C. T. Pusta, Tomulescu Ioana Mihaela, **D. Noje**, and E. Laslo, “Contributions about some cranial measurements in feminine population of Ștei locality, Bihor county,” presented at the 15th Congress of European Anthropological Association, Budapest, Sep. 2006. [Online]. Available: <http://eaa2006.elte.hu/program.htm>
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- [6] E. Laslo, **D. Noje**, Tomulescu Ioana Mihaela, and C. T. Pusta, “Genetic algorithm in anthropological pattern recognition,” presented at the 15th Congress of European Anthropological Association, Budapest, Sep. 2006. [Online]. Available: <http://eaa2006.elte.hu/program.htm>

Data

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