

MEMORIU ȘTIINȚIFIC
Drd. BOGORIN (BOGORIN - PREDESCU) L. Adrian

Studii de doctorat

Perioada: 2021 - 2026

Conducător științific: Prof. univ. dr. ing. **Aurel Mihail ȚÎȚU**

Domeniu: Inginerie Și Management

Titlul tezei de doctorat: Sistem integrat de management al calității procesului de comunicații al informațiilor din industria automotive

Activitate științifică

A. Lista de lucrări științifice (articole în reviste sau volume)

1. Bogorin-Predescu A., Neamtu C.Gh. D., Țîțu A. M., „*Bibliometric analysis on the topic of embedded systems: A practical approach*”, In: Annals of the Academy of Romanian Scientists Series on Economy, Law and Sociology, Vol. 9, Issue 1, 2026;
2. Bogorin-Predescu A., Neamtu C.Gh. D., Țîțu A. M., „*Bibliometric analysis on the topic of communication protocols for embedded systems: A practical approach*”, In: Annals of the Academy of Romanian Scientists Series on Economy, Law and Sociology, Vol. 9, Issue 2, 2026;
3. Bogorin-Predescu A., Țîțu S., Țîțu A. M., Marcu D. F., Dragomir D. C., Dragomir M., „*Innovative Cost-Effective Embedded System to Enhance ECU Firmware Quality Through Remote Hybrid Testing in Automotive Domain*”, Applied Sciences, 15 (23), 2025;
4. Bogorin-Predescu A., Țîțu A. M., „*Total quality management in the knowledge-based organization: Managerial strategies oriented towards excellence*”, In: Annals of the Academy of Romanian Scientists Series on Economy, Law and Sociology, Vol. 8, Issue 3 Special, 2025;
5. Bogorin-Predescu A., Țîțu A. M., „*A specific approach about the process management in the automotive industry*”, In: Annals of the Academy of Romanian Scientists Series on Economy, Law and Sociology, Vol. 8, Issue 1, 2025;
6. Bogorin-Predescu A., Țîțu Ș., Țîțu A. M., Nabiałek M., „*Data acquisition system for a hydroelectric turbine located linearly on the course of flowing water*”, In: Archive of Metallurgy and Materials Review, Vol. 70, Nr. 2/2025, 2025;
7. Țîțu A. M., Covaci C. A., Bogorin-Predescu A., „*The evolution of product quality in the automotive sector: the interdependence between raw material quality, finished products, and supplier performance*”, In: „New Technologies, Development and Application VIII”, 2025;
8. Stan N. M., Bogorin-Predescu A., Țîțu A. M., „*Market trends in 2024 in the IT project management industry*”, Journal of Research and Innovation for Sustainable Society, JRISS, Vol. 6, Issue 2, 2024;
9. Țîțu A. M., Bâlc D., Bogorin-Predescu A., Bâlc E., „*The contribution of a mechatronic system for withdrawal and arrangement of microphone cables in the context of audio system optimization*”, In: Lecture Notes in Networks and Systems, Vol. 1129, 2024;
10. Țîțu A. M., Bogorin-Predescu A., „*Communication management for the acquisition of data between the pc and a device called the hydroelectric turbine deployed linearly on the course of flowing water*”, International Journal of Mechatronics and Applied Mechanics, International Journal of Mechatronics and Applied Mechanics, IJOMAM Review, Vol. 17, 2024;
11. Bogorin-Predescu A., Țîțu A. M., Pană M. M., „*Flow management for software developers in the knowledge based organization from the automotive industry*”, International Journal of Mechatronics and Applied Mechanics, IJOMAM Review, Vol. 18, 2024;
12. Neamtu Gh., Țîțu A. M., Pop A. B., Bogorin-Predescu A., „*Road Safety in The European Road Transport System and the Correlation with Sustainable Development*”, In: IOP Conference Series: Materials Science and Engineering, Vol. 1311, 2024;

13. Bogorin-Predescu A., Țițu A. M., Tertereanu P., Bâlc D., Gusan V., "IOT system for acquiring ambient data using a dedicated portable platform", International Journal of Mechatronics and Applied Mechanics, IJOMAM Review, Vol. 15, 2024;
14. Țițu A. M., Bâlc D., Gusan V., Bogorin-Predescu A., Tertereanu P., Stanciu A., "Autonomous mobile platform with uv ray disinfection system, a modular and affordable solution for virus elimination", International Journal of Mechatronics and Applied Mechanics, IJOMAM Review, Vol. 15, 2024;
15. Tertereanu P., Țițu A. M., Bogorin-Predescu A., Gusan V., Bâlc D., "Integrated it systems for the management of activities related to border control at the schengen space", In: „New Technologies, Development and Application VII”, Vol. 1070, 2024;
16. Gusan V., Țițu A. M., Bogorin-Predescu A., Tertereanu P., Bâlc D., "From industrial robots to collaborative robots: exploring the transformation in the collaborative work environment", In: „New Technologies, Development and Application VII”, Vol. 1069, 2024;
17. Țițu A. M., Gusan V., Bogorin-Predescu A., "Enhancing collaborative robot communication with electrical discharge machine through modbus TCP integration: a feasibility and application study", International Journal of Mechatronics and Applied Mechanics, IJOMAM Review, Vol. 14, 2023;
18. Pană M. M., Țițu A. M., Tertereanu P., Moldoveanu A. M., Bogorin-Predescu A., "Can artificial intelligence still be considered a nonconventional technology in 2023?", In: Revista de Management și Inginerie Economică, Vol. 23, 2023;
19. Bogorin-Predescu A., Țițu S., Țițu A. M., 2023, "Data acquisition system for a hydroelectric turbine with deformable blades", In: Archive of Metallurgy and Materials Review, Vol. 69, Nr. 4/2024, 2024;
20. Țițu A. M., Bogorin-Predescu A., 2023, "Modeling of the communication process between two microcontrollers in order to optimize the execution of specific tasks", In: Lecture Notes in Networks and Systems, vol 762, 2023;
21. Țițu A. M., Bogorin-Predescu A., Bogorin-Predescu O., Țițu S., "Contributions to the design and implementation of an advanced electronic system for controlling the elongation of the vertebral column", In: ACTA TECHNICA NAPOCENSIS, Series: APPLIED MATHEMATICS, MECHANICS and ENGINEERING, Vol 66, No. 5 (2023), 2023;
22. Bogorin-Predescu A., Țițu A. M., Oprean C., "Improving the quality of rapid prototyping processes of electronic control units by using a dedicated software platform", In: ACTA TECHNICA NAPOCENSIS, Series: APPLIED MATHEMATICS, MECHANICS and ENGINEERING, Vol 66, Issue Special I, 2023;
23. Deac-Suteu D. S., Țițu A. M., Bogorin-Predescu A., "Applicative scientific research on the possibility of improving service quality management in the service of local and regional interest", Sciendo, <https://sciendo.com/chapter/9788367405201/10.2478/9788367405201-006> , 2023;
24. Țițu A. M., Bogorin-Predescu A., "Modelling the interwoven parallel testing process in the automotive industry", International Journal of Mechatronics and Applied Mechanics, IJOMAM Review, Vol. 13, 2023;
25. Bogorin-Predescu A., Țițu S., Țițu A. M., "Product life cycle in automotive", In: „New Technologies, Development and Application VI”, Vol. 687, 2023;
26. Țițu A. M., Bogorin-Predescu A., "Contributions to the modeling of manufacturing processes for the implementation of the kanban methodology in the automotive industry", International Journal of Mechatronics and Applied Mechanics, IJOMAM Review, Vol. 12, 2022;
27. Bogorin-Predescu A., Țițu A. M., Niță N. M., Domnariu V. L., "Modeling of the automatic testing process of electronic control units in the automotive industry", International Journal of Mechatronics and Applied Mechanics, IJOMAM Review, Vol. 12, 2022.

B. Participări la conferințe/workshop-uri

1. International conference on innovative research, Iași, România, 6-8 June;
2. 11th International Conference „NEW TECHNOLOGIES, DEVELOPMENT AND APPLICATION“ NT-2025, Sarajevo, Bosnia and Herzegovina, 26-28 June, 2025;
3. International Conference on reliable systems engineering, ICoRSE 2023, București, România, 5 - 6 Septembrie, 2023;
4. EAEC MVT 2022, The 17th European Automotive Congress, The 32nd SIAR International Congress of Automotive and Transport Engineering, Timișoara, Romania, 26-28 October 2022;

5. 10th International Conference „NEW TECHNOLOGIES, DEVELOPMENT AND APPLICATION“ NT-2024, Sarajevo, Bosnia and Herzegovina, June 20-22, 2024;
6. The 22nd International Conference of Nonconventional Technologies, Bistrița, România, 16-18 Noiembrie, 2023;
7. International conference on innovative research, Iași, România, 11-12 Mai, 2023;
8. International Conference on reliable systems engineering, ICoRSE 2023, București, România, 7-8 Septembrie 2023;
9. 27th Edition of the conference Innovative Manufacturing Engineering & Energy, IMANNE 2023, Chișinău, Moldova, 12th -14th of October 2023;
10. International Foundation for Production Research 2023, IFPR 2023, Cluj-Napoca, Romania, 21-23 July 2023;
11. 27th International Conference on Production Research 2023, ICPR 2023, Cluj-Napoca, Romania, 23-28 July 2023;
12. The XXVII International Conference "INVENTICA 2023. Science of creativity", Iasi, Romania, June 22th, 2023;
13. 9th International Conference „NEW TECHNOLOGIES, DEVELOPMENT AND APPLICATION“ NT-2023, Sarajevo, Bosnia and Herzegovina, June 22-24, 2023.

C. Brevete

1. Țițu A. M., Mărginean I., Țițu S., Bogorin-Predescu O., Bogorin-Predescu A., Moldovan A. M., Oprean C., *Structură robotică diadică și triadică în scaunele avioanelor de cursa lungă pentru eliminarea stresului articular al pasagerilor*, Cerere de Brevet de Inventie Nr. A-2025-00068, RO139012-A0, România;
2. Țițu A. M., Mărginean I., Țițu S., Bogorin-Predescu O., Bogorin-Predescu A., Moldovan A. M., Oprean C., *Ansamblu ergonomic antisedentarism pentru home office*, Cerere de Brevet de Inventie Nr. A-2023-00089, RO137487-A0, România;
3. Țițu A. M., Moldovan A. M., Bogorin-Predescu A., Țițu S., Bogorin-Predescu O. M., Oprean C., Mărginean I., *Sistem personal antisedentarism*, Brevet de invenție Nr RO133869-B1 2022, România;
4. Țițu A. M., Oprean C., Bondrea I., Carabulea I., Mărginean I., Moldovan A. M., Bogorin-Predescu A., Iuonaș I. D., *Sistem de comandă și control pentru o bicicletă electrică*, Brevet de invenție Nr RO129293-B1 2022, România;
5. Țițu A. M., Oprean C., Bondrea I., Mărginean I., Țițu S., Moldovan A. M., Bogorin-Predescu A., *Automobil electric personal individual*, Brevet de invenție Nr RO130763-B1 2022, România;
6. Țițu A.M., Oprean C., Mărginean I., Moldovan A.M., Bogorin-Predescu A., Țițu S., *Automobil electric individual semisferic, cu scaun rotitor*, Brevet de invenție Nr RO131963-B1 2021, România;
7. Bondrea I., Țițu A. M., Oprean C., Mărginean I., Moldovan A. M., Bogorin-Predescu A., *Scaun pentru lucrul la PC, cu principiu activ de destindere a coloanei vertebrale*, Brevet de invenție Nr. RO129280-B1 2021, România.

D. Membru în comitete de organizare sau comitete științifice ale conferințelor/colective de redacție ale unor reviste

1. Membru în comisia de jurizare la "International Exhibition INVENTCOR 5rd edition", Deva, România, 04 – 06 Aprilie 2024;
2. Membru în comisia de jurizare la "International Exhibition INVENTCOR 4rd edition", Deva, România, 14 – 15 Septembrie 2023.

Student-doctorand

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