

Universitatea Tehnică din Cluj-Napoca  
Facultatea Automatica si Calculatoare  
Departamentul Calculatoare

Candidat: Conf. Dr. Ing. Ionuț Manuel Anghel

## LISTA DE LUCRARI PUBLICATE

### A – Teza de doctorat

„Tehnici de Calcul Autonomic pentru Sisteme Pervasive si Centre de Date Eficiente Energetic”

Conducător științific: Prof.dr.ing. Ioan Salomie

Universitatea Tehnica din Cluj-Napoca, Facultatea de Automatica si Calculatoare

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### B – Cărți și capitole în cărți

#### **B1. CĂRȚI**

1. **I. Anghel**, T. Cioara - *Ambient Intelligence for Elders Care*, UT Press, 2018, ISBN: 978-606-737-297-7, 85 pagini.
2. T. Cioara, **I. Anghel** - *Distributed Frameworks for Managing Cyber Physical Production Systems in Smart Factories*, UT Press, 2018, ISBN: 978-606-737-296-0, 105 pagini.
3. M. Antal, C. Pop, D. Moldovan, T. Petrican, C. Stan, I. Salomie, T. Cioara, **I. Anghel**, *Distributed Systems – Laboratory Guide*, Editura UTPRESS Cluj-Napoca, 2018 ISBN 978-606-737-329-5
4. **I. Anghel**, I. Salomie, T. Cioara, G. Copil, D. Moldovan - *Autonomic computing techniques for pervasive systems and energy efficient data centres*, U.T. Press, 2013, ISBN 978-973-662-850-4, 140 pagini.
5. T. Cioara, I. Salomie, **I. Anghel**, D. Moldovan, G. Copil - *Context aware adaptive systems with applicability in green service centres*, UT Press, 2013, ISBN 978-973-662-851-1, 174 pagini.
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#### **B2. CAPITOLE DE CARTE**

1. D. Moldovan, **I. Anghel**, T. Cioara and I. Salomie, Apache Spark for Digitalization, Analysis and Optimization of Discrete Manufacturing Processes, Big Data Platforms and Applications, Springer International Publishing, Pop Florin, Neagu Gabriel (Eds.), 2021, ISSN 1617-7975
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4. T. Cioara, **I. Anghel**, D. Valea, I. Salomie, V. S. Martin, A. Marchena, E. Jimeno and M. Vastenburger, Adaptive Workspace Interface for Facilitating the Knowledge Transfer from Retired Elders to Start-up Companies, in „*Ambient Assisted Living and Enhanced Living Environments: Principles, Technologies and Control*”, book edited by: Ciprian Dobre, Constandinos X. Mavromoustakis, Nuno Garcia, Rossitza Ivanova Goleva and George Mastorakis, ISBN: 978-0-12-805195-5, Elsevier, 2016.
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## **C – Articole in reviste din fluxul stiintific international**

### **C1. Articole în reviste de specialitate de circulație internațională cotate ISI**

1. **I. Anghel**, T. Cioara, D. Moldovan, M. Antal, C.D. Pop, I. Salomie, C.B. Pop, V.R. Chifu, Smart Environments and Social Robots for Age-Friendly Integrated Care Services. *Int. J. Environ. Res. Public Health* 2020, 17, 3801. **IF: 2.849 Q1**
2. C. D. Pop, M. Antal, T. Cioara, **I. Anghel** and I. Salomie, Blockchain and Demand Response: Zero-Knowledge Proofs for Energy Transactions Privacy, *Sensors*, 2020, 20, 5678. **IF:3.275 Q1**
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5. A.V. Vesa, T. Cioara, **I. Anghel**, M. Antal, C. Pop, B. Iancu, I. Salomie, V.T. Dadarlat, Energy Flexibility Prediction for Data Center Engagement in Demand Response Programs. *Sustainability* 2020, 12, 1417, **IF: 2.576 Q2**
6. C. Pop, T. Cioara, M. Antal, **I. Anghel**, I. Salomie, M. Bertoncini, A Fog Computing Enabled Virtual Power Plant Model for Delivery of Frequency Restoration Reserve Services. *Sensors* 2019, 19, 4688. **IF:3.275 Q1**
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11. T. Cioara, **I. Anghel**, I. Salomie, L. Barakat, S. Miles, D. Reidlinger, A. Taweel, C. Dobre, F. Pop, Expert system for nutrition care process of older adults, *Future Generation Computer Systems*, Volume 80, March 2018, **IF:6.125 Q1**
12. T. Cioara, **I. Anghel**, M. Bertoncini, I. Salomie, D. Arnone, M. Mammina, T. Velivassaki, M. Antal, Optimized Flexibility Management enacting Data Centres Participation în Smart Demand Response Programs, *Future Generation Computer Systems*, Volume 78, Part 1, January 2018. **IF: 6.125 Q1**
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6. I. Salomie, M. Dinsoreanu, T. Cioara, **I. Anghel**, T.I. Salomie, „Industrial Business Process Modeling, Verification and Simulation with Application in Food Industry”, *Automation, Computers, Applied Mathematics Journal*, Vol. 17, No. 1, 2008, pp. 102 - 111, ISSN: 1221-437X. [**Mathematical Reviews**]
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## **D – Publicații in extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate**

### **D1. Articole cotate ISI**

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2. D. Moldovan, **I. Anghel**, T. Cioara, I. Salomie, Time Series Features Extraction Versus LSTM for Manufacturing Processes Performance Prediction, *SPED 2019*, Timisoara, Romania
3. R. Zanc, T. Cioara, **I. Anghel**, Forecasting Financial Markets using Deep Learning, *ICCP 2019*, Cluj-Napoca, Romania
4. A. V. Vesa, N. Ghitescu, C. Pop, M. Antal, T. Cioara, **I. Anghel**, I. Salomie, A Stacking Multi-Learning Ensemble Model for Predicting Near Real Time Energy Consumption Demand of Residential Buildings, *IEEE ICCP2019*, September 2019, Cluj-Napoca, Romania
5. D. Moldovan, A. Visovan, M. Bologa, C. Pop, V. R. Chifu, **I. Anghel**, T. Cioara and I. Salomie, Random Forest and Sequential Model for Anomalies Detection in the Activities of the People with Dementia, *MediTech 2018, IFMBE Proceedings*, vol 71. Springer, Singapore, 2019
6. V. R. Chifu, C. B. Pop, T. Cioara, **I. Anghel**, D. Moldovan and I. Salomie, Identifying the Polypharmacy Side-Effects in Daily Life Activities of Elders with Dementia, *Volume 798 of the Studies in Computational Intelligence series*, ISSN 978-3-319-99625-7, IDC 2018
7. C. Pintea, E. Pintea, M. Antal, C. Pop, T. Cioara, **I. Anghel** and I. Salomie, CoolCloudSim: Integrating Cooling System Models in CloudSim, *14th International Conference on Computer Communication and Processing (ICCP 2018)*.
8. D. Moldovan, A. Olosutean, V. Chifu, C. Pop, T. Cioara, **I. Anghel**, I. Salomie, Big Data Analytics for the Daily Living Activities of the People with Dementia, *14th International Conference on Computer Communication and Processing (ICCP 2018)*.
9. C. Pop, M. Antal, C. Pop, A. V. Vesa, C. Tudor, **I. Anghel**, I. Salomie and T. Petrican, Decentralizing the Stock Exchange using Blockchain: An Ethereum-based implementation of the Bucharest Stock Exchange, *14th International Conference on Computer Communication and Processing (ICCP 2018)*
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11. R. Jurca, T. Cioara, **I. Anghel**, M. Antal, C. Pop, D. Moldovan, Activities of Daily Living Classification using Recurrent Neural Networks, *RoEduNet Conference 2018*.
12. D. Moldovan, V. Chifu, C. Pop, T. Cioara, **I. Anghel**, I. Salomie, Chicken Swarm Optimization and Deep Learning for Manufacturing Processes, *RoEduNet Conference 2018*.
13. **I. Anghel**, T. Cioara, D. Moldovan, I. Salomie and M. M. Tomus, Prediction of Manufacturing Processes Errors: Gradient Boosted Trees Versus Deep Neural Networks, *EUC-2018*.

14. D. Moldovan, M. Antal, C. Pop, A. Olosutean, T. Cioara, **I. Anghel**, and I. Salomie, Spark-based Classification Algorithms for Daily Living Activities, *Advances in Intelligent Systems and Computing Series*, ISSN 2194-5357, CSOC 2018
15. **I. Anghel**, T. Cioara, T. Velivassaki, M. Bertoncini, A. Voulkidis, A. Oleksiak, N. Saintherant, V. Georgiadou, M. A. Paglia and C. Pop, Converting Data Centres in Energy Flexibility Ecosystems, *2018 IEEE Industrial and Commercial Power Systems Europe*.
16. T. Cioara, M. Bertoncini, D. Ioannidis, V. Croce, **I. Anghel**, K. Votis, C. Pop and L. D'Oriano, Enabling New Tehnologies for Demand Response Decentralized Validation using Blockchain, *2018 IEEE Industrial and Commercial Power Systems Europe*.
17. C. Pop, A. Craciun, C. Knoblaui, M. Antal, D. Moldovan, T. Cioara, **I. Anghel** and I. Salomie, "Semantic data factory: A framework for using domain knowledge in software application development," *2017 13th IEEE International Conference on Intelligent Computer Communication and Processing (ICCP)*, Cluj-Napoca, Romania, 2017, pp. 21-28. ISBN: 978-1-5386-3368-7
18. D. Moldovan, T. Cioara, **I. Anghel** and I. Salomie, "Machine learning for sensor-based manufacturing processes," *2017 13th IEEE International Conference on Intelligent Computer Communication and Processing (ICCP)*, Cluj-Napoca, Romania, 2017, pp. 147-154. ISBN: 978-1-5386-3368-7
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20. M. Antal, C. Pop, T. Cioara, **I. Anghel**, I. Tamas and I. Salomie, "Proactive day-ahead data center operation scheduling for energy efficiency: Solving a MIOCP using a multi-gene genetic algorithm," *2017 13th IEEE International Conference on Intelligent Computer Communication and Processing (ICCP)*, Cluj-Napoca, Romania, 2017, pp. 527-534. ISBN: 978-1-5386-3368-7
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22. D. Moldovan, P. Stefan, C. Vuscan, V. R. Chifu, **I. Anghel**, T. Cioara, I. Salomie, „Diet Generator for Elders using Cat Swarm Optimization and Wolf Search”, *International Conference on Advancements of Medicine and Health Care through Technology*; 12th - 15th October 2016, Cluj-Napoca, Romania, IFMBE Proceedings, vol 59. Springer, pp 238-243, 2017
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25. **I. Anghel**, T. Cioara, I. Salomie, ICT Architecture for Supporting Elder Employees to Make Conscious Decisions Under Time Pressure. in „*State-of-the-Art and Future Directions of Smart Learning. Lecture Notes in Educational Technology*”, ISBN: 978-981-287-866-3, Springer, Singapore, 2016.
26. M. Antal, C. Pop, D. Valea, T. Cioara, **I. Anghel**, I. Salomie, Optimizing Data Centres Operation to Provide Ancillary Services On-demand, in „*Economics of Grids, Clouds*,

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## **D2. Articole indexate BDI**

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5. I. A. Daniel, C. Pop, **I. Anghel**, M. Antal and T. Cioara, A Blockchain based solution for Managing Transplant Waiting Lists and Medical Records, *International Conference on Computer Communication and Processing (ICCP 2020)*, 3 – 5 September 2020, Cluj-Napoca, Romania [IEEE]
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