Universitatea „POLITEHNICA" din Bucureşti
Facultatea de Electronică, Telecomunicaţii şi Tehnologia Informaţiei

Listă de lucrări

Conf. Dr. Ing. Marius Constantin Vochin

I. TEZA (E) DE DOCTORAT (T)

T1: *Metode de virtualizare în contextul Internetului viitor,* calificativ Foarte Bine

II. CĂRŢI PUBLICATE (C)

Cb1: Gabriel Lucian Ioan, Grazziela Niculescu, Marius-Constantin **Vochin,** TRANSMISSION, SWITCHING and ROUTING in communication networks, Editura Politehnica Press, 2021, ISBN 978-606-515-976-1.

Cb2: Gabriel Lucian Ioan, Grazziela Niculescu, Marius-Constantin **Vochin,** TRANSMISSION, COMMUTATION et ROUTAGE dans les réseaux de communication, Editura Politehnica Press, 2021, ISBN 978-606-515-977-8

Cb3: Gabriel Lucian Ioan, Grazziela Niculescu, Marius-Constantin **Vochin,** Qualité des services et performance des réseaux de communications, Editura Politehnica Press, 2021, ISBN 978-606-515-965-5

Cb4: Marius-Constantin **Vochin**, Radu Caius Lupu, Sisteme de operare, Editura Politehnica Press, 2020, ISBN 978-606-515-906-8.

Cb5: Quality of Telecommunications Services, Graţiela Niculescu, Lucian Ioan, Marius **Vochin**, ISBN 978-606-515-912-9, Editura Politehnica Press, 2020.

Cb6: Routing in Telecommunication Networks, **Marius-Constantin Vochin**, Alexandru Rusu-Casandra, Grazziela Niculescu, ISBN 978-606-515-867-2, Editura Politehnica Press, 2019.

Cb7: Switching Systems in Telecommunication Networks, Alexandru Rusu-Casandra, **Marius-Constantin Vochin**, Lucian Ioan, ISBN 978-606-515-868-9, Editura Politehnica Press, 2019.

Cb8: Arhitecturi şi Protocoale pentru Comunicaţii, Teorie şi aplicaţii practice, Radu Caius Lupu, Dragoş Ş. Niculescu, **Marius Constantin Vochin**, ISBN 978-606-515-727-9, Editura Politehnica Press, 2016.

Cb9: **Vochin, M.**, Zoican, S., & Borcoci, E. (2017). Intelligent system for vehicle navigation assistance. Advances in Intelligent Systems and Computing (Vol. 570). https://doi.org/10.1007/978-3-319-56538-5_15, WOS:000425541200015.

Cb10: **Marius Vochin**, Alexandru Vulpe, George Suciu, L. B. (2017). Intelligent Displaying and Alerting System Based on an Integrated Communications Infrastructure and Low-Power Technology. In *Recent Advances in Information Systems and Technologies*. Springer International Publishing.

III. ALTE MATERIALE PUBLICATE (I,D)

I1. "Ethernet switching, STP, VLAN", http://discipline.elcom.pub.ro/apc/Lab/6.switching.pdf

I2. "Monitorizarea hosturilor utilizand Nagios", http://discipline.elcom.pub.ro/sim/

IV. ARTICOLE / STUDII IN EXTENSO PUBLICATE (R,V):

Ris - Reviste de specialitate de circulaţie internaţională recunoscute

Ris1 - Parisa Niloofar, Deena P. Francis, Sanja Lazarova-Molnar, Alexandru Vulpe, Marius-Constantin Vochin, George Suciu, Mihaela Balanescu, Vasileios Anestis, Thomas Bartzanas, DATA-DRIVEN DECISION SUPPORT IN LIVESTOCK FARMING FOR IMPROVED ANIMAL HEALTH, WELFARE AND GREENHOUSE GAS EMISSIONS: OVERVIEW AND CHALLENGES, Computers and Electronics in Agriculture, Volume 190, 2021, 106406, ISSN 0168-1699, https://doi.org/10.1016/j.compag.2021.106406, ScienceDirect

Ris2 - Popa, R.A.; Popa, D.C.; Mărginean, G.E.; Suciu, G.; Bălănescu, M.; Paştea, D.; Vulpe, A.; **Vochin, M.**; Drăgulinescu, A.M. Hybrid Platform for Assessing Air Pollutants Released from Animal Husbandry Activities for Sustainable Livestock Agriculture. Sustainability 2021, 13, 9633. https://doi.org/10.3390/su13179633, WOS 000694541300001.

Ris3 - Suciu, George, Mari-Anais Sachian, Alexandru Vulpe, **Marius Vochin**, Aristeidis Farao, Nikolaos Koutroumpouchos, and Christos Xenakis. 2021. "SealedGRID: Secure and Interoperable Platform for Smart GRID Applications" Sensors 21, no. 16: 5448. https://doi.org/10.3390/s21165448, WOS:000689771600001.

Ris4 - Vochin, M.; Vulpe, A.; Boicescu, L.; Obreja, S.G.; Suciu, G. An Intelligent Low-Power Displaying System with Integrated Emergency Alerting Capability. Sensors 2019, 19, 666, Q1, Impact factor (2019) 3,031, https://doi.org/10.3390/s19030666, WOS:000459941200229.

Ris5 - Vochin, M., Zoican, S., & Borcoci, E. Intelligent vehicle navigation system with assistance and alerting capabilities. Concurrency & Computation: Practice & Experience, WILEY, 18 pp, 2018, ISSN:1532-0634, https://doi.org/10.1002/cpe.4402, Q3, Impact factor (2019) 1.167, WOS:000491414300018.

Ris6 - Media Aware Network Element Data Plane Performance Evaluation. **Marius Vochin**, Eugen Borcoci, Gustavo Carneiro. 2015, The Scientific Bulletin, Series C, University POLITEHNICA of Bucharest, ISSN (print): 2286-3540 / (online): 2286-3559, WOS:000421805200007, IF 0,365, ESCI, ISI Q4.

Rio – Alte reviste de specialitate de circulaţie internaţională

Rio1. Borcoci, E., Obreja, S. G., & **Vochin, M**. C. Functional Layered Architectures and Control Solutions in Internet of Vehicles-Comparison. International Journal on Advances in Internet Technology 11(1&2), 2018, 31–43. ThinkMind. ISSN: 1942-2652, https://www.thinkmind.org/index.php?view=article&articleid=inttech_v11_n12_2018_4.

Rio2. Borcoci, E., Iorga, R., **Vochin, M**., & Negru, D. (2015). Design of a Flexible Over the Top Content Streaming System with Dual Adaptation. International Journal On Advances in Telecommunications. 8(3&4), 215–226. ISBN 9781510816640.

Rio3. Borcoci, E., **Vochin, M**., Constantinescu, M., Batalla, J. M., & Negru, D. (2015). Server and Path Selection in a Light Architecture Content Streaming System with Dual Adaptation. International Journal On Advances In Networks And Services · January 2015, NetSer15v8(n12), 92–105, ISSN 1942-2644, IF 0.546 (2015).

Rio4. Management System Scalability Evaluation in Multi-domain Content Aware Networks, Eugen Borcoci, Mihai Constantinescu, **Marius Vochin**, International Journal On Advances in Networks and Services, vol. 7 nr. 3&4 2014, issn: 1942-2644, pp 216 to 227.

Vis- Volumele unor manifestări ştiinţifice internaţionale recunoscute, indexate ISI

Vis1. Andra Ciobanu, Eugen Borcoci, Marius Constantin **Vochin**, and Frank Y. Li. Optimal Service Placement with QoS Monitoring in NFV and Slicing Enabled 5G IoT Networks, acceptat la IEEE Global Communications Conference, 7-11 December 2021 // Madrid, Spain

Vis2. Andra Ciobanu, Eugen Borcoci, Marius Constantin **Vochin**, A Quality-of-Service Scenario Awareness for Use-Cases of Open Source Management and Control System Hub in Edge Computing, IEEE International Black Sea Conference on Communications and Networking, 24-28 May 2021, 10.1109/BlackSeaCom52164.2021.9527879.

Vis3. M. Bălănescu et al., "Decision Support Platform for Intelligent and Sustainable Farming," 2020 IEEE 26th International Symposium for Design and Technology in Electronic Packaging (SIITME), Pitesti, Romania, 2020, pp. 89-93, doi: 10.1109/SIITME50350.2020.9292196, WOS:000651085100016

Vis4. Sorin Zoican, Marius **Vochin**, Roxana Zoican, Dan Galatchi, „Distributed Internet of Things Framework using Dual Core Blackfin Microcomputer", International Symposium on Electronics and Telecommunications 2020. ISETC'20, Timisoara, November 05 - 06 2020, IEEE Explore.

Vis5. George Suciu, Cristiana Istrate, Mari-Anais Sachian, Alexandru Vulpe, **Marius Vochin**, FI-WARE based authorization for a smart grid's scalable, trusted, and interoperable platform - Practical Experience Report. The 15th International Conference on Critical Information Infrastructures Security 2020, September 2020, Bristol, UK.

Vis6. Eugen Borcoci, **Marius Vochin**, Serban Georgica Obreja, On Systematic Identification of Requirements for Vehicle-to-Everything 5G Slices, The Tenth International Conference on Mobile Services, Resources, and Users, held in Lisbon, Portugal during September 27 - October 01, 2020, **Best Paper Award**

Vis7. George Suciu, Cristiana Istrate, Mari-Anais Sachian, Alexandru Vulpe, **Marius Vochin**, Aristeidis Farao, Christos Xenakis, FI-WARE authorization in a Smart Grid scenario, The Global IoT Summit (GIoTS2020), June 2020, IEEE, doi 10.1109/GIOTS49054.2020.9119589, WOS:000610926300016.

Vis8. Sorin Zoican, **Marius Vochin**, Roxana Zoican, Dan Galaţchi, Neural Network-based Data Communication System in Internet of Vehicles, The 13th International Conference on Communications, June, 2020, Bucharest, IEEE, WOS:000612723900044, ISBN:978-1-7281-5611-8, 10.1109/COMM48946.2020.9142007

Vis9. L. Dobrescu, S. Obreja, M. Vochin, D. Dobrescu and S. Halichidis, "New Approaches for Quantifying Internet Activity," 2019 E-Health and Bioengineering Conference (EHB), Iasi, Romania, 2019, pp. 1-4, doi: 10.1109/EHB47216.2019.8969998, WOS:000558648300130, IEEE

Vis10. George Suciu, Mari-Anais Sachian, Marius Dobrea, Cristiana- Ioana Istrate, Ana Lavinia Petrache, Alexandru Vulpe, **Marius Vochin**, Securing the Smart Grid: A Blockchain-based Secure Smart Energy System, 54th International Universities Power Engineering Conference – UPEC 2019, Bucharest, Romania, IEEE Explore. 10.1109/UPEC.2019.8893484, WOS:000619338200027.

Vis11. George Suciu, Cristiana-Ioana Istrate Alexandru Vulpe, Mari-Anais Sachian, **Marius Vochin**, Attribute-based Access Control for Secure and Resilient Smart Grids, 6th International Symposium for ICS & SCADA Cyber Security Research 2019, Athens, Greece.

Vis12. George Suciu, Mari-Anais Sachian, **Marius Vochin**, Marius Dobrea, Cristian Beceanu, Ana Petrache, Raluca Iosu, Blockchain applicability using Smart Power Management: SealedGrid Architecture, 2019 IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), 2 oct 2019, Bucharest, Romania, WOS 000550100400222, 10.1109/isgteurope.2019.8905680.

Vis13. Vochin, Marius, Alexandru Vulpe, Marcu, Ioana, Suciu, G. (2019). Low-power intelligent displaying system with indoor mobile location capability. FABULOUS 2019 - 4th EAI International Conference on Future Access Enablers of Ubiquitous and Intelligent Infrastructures. Sofia, SpringerLink, WOS:000552334400015, 10.1007/978-3-030-23976-3_15.

Vis14. Zoican, S., **Vochin, M.**, Zoican, R., & Galatchi, D. Blockchain and Consensus Algorithms in Internet of Things. 2018. International Symposium on Electronics and Telecommunications ISETC 2018 (pp. 1–4). DOI: 10.1109/isetc.2018.8583923, Timişoara, IEEE, WOS:000463031500039.

Vis15. Fading and Wi-Fi Communication Analysis using Ekahau Heatmapper George Suciu, Alexandru Vulpe, **Marius Vochin**. Andreea Mitrea, Muneeb Anwarand, and Hussain Ijaz, EUC 2018 16th IEEE International Conference on Embedded and Ubiquitous Computing 29-31 October 2018, Faculty of Automatic Control and Computers, University Politehnica of Bucharest, Romania, pp 145-149, DOI: 10.1109/euc.2018.00029, WOS:000458739600022, IEEE.

Vis16. Zoican, S., **Vochin, M.**, Zoican, R., & Galatchi, D. (2018). The Emotion Detection in Internet of Things Using Blackfin Microcomputers Family and Visual Analytics Tools. In 2018 International Conference on Communications (COMM) (Vol. 747, pp. 115–120). Bucharest. WOS:000449526000020, https://doi.org/10.1109/ICComm.2018.8430121, ISBN: 978-1-5386-2350-3, IEEE

Vis17. Borcoci, E., **Vochin, M.**, & Obreja, S. (2018). Mobile Edge Computing versus Fog Computing in Internet of Vehicles. In The Tenth International Conference on Advances in Future Internet AFIN 2018. Venice, Italy: IARIA. Retrieved from https://www.iaria.org/conferences2018/ProgramAFIN18.html, pp 8-15, ISSN 2308-4340.

Vis18. Zoican, S., **Vochin, M.**, Zoican, R., & Galaţchi, D. (2018). Face detection in internet of things using blackfin microcomputers family. In Advances in Intelligent Systems and Computing (Vol. 747, pp. 128–135), ISBN 978-3-319-77699-6, https://doi.org/10.1007/978-3-319-77700-9_13, SpringerLink.

Vis19. Boicescu, L., **Vochin, M.**, Vulpe, A., & Suciu, G. (2018). Intelligent low-power displaying and alerting infrastructure for smart buildings. In Advances in Intelligent Systems and Computing (Vol. 747, pp. 136–145). https://doi.org/10.1007/978-3-319-77700-9_14, SpringerLink.

Vis20. Suciu, G., Scheianu, A., Bălăceanu, C. M., Petre, I., Dragu, **M., Vochin**, M., & Vulpe, A. (2018). Sensors fusion approach using UAVs and body sensors. Advances in Intelligent Systems and Computing (Vol. 747, pp 146-153). https://doi.org/10.1007/978-3-319-77700-9_15, SpringerLink.

Vis21. Vulpe, A., **Vochin, M.**, Boicescu, L., & Suciu, G. (2017). Intelligent low-power displaying and alerting infrastructure for secure institutional networks. In 3rd EAI International Conference on Future Access Enablers of Ubiquitous and Intelligent Infrastructures OCTOBER 12–14, 2017 | BUCHAREST, ROMANIA. Bucharest, ISBN 978-3-319-92212-6, 10.1007/978-3-319-92213-3_21, WOS:000481658200021.

Vis22. Vochin, M., & Al-Amily, H. (2017). Mobile Communication application for V2V Systems. In the 13-th International Symposium on Signals, Circuits and Systems. ISSCS 2017. Iasi, Romania. Retrieved from http://scs.etc.tuiasi.ro/isscs2017/, WOS:000425211500064, ISBN:978-1-5386-0674-2, DOI: 10.1109/ISSCS.2017.8034926, EID: 2-s2.0-85032266770, IEEE.

Vis23. Al-Amily, H., & **Vochin, M.** (2017). Practical Design of High Frequency Low Noise Amplifier using Ansys. In ECAI 2017 - International Conference – 9th Edition Electronics, Computers and Artificial Intelligence. Targoviste. Retrieved from http://ecai.ro/index.php, WOS:000425865900086, ISBN:978-1-5090-6458-8, ISSN: 2378-7147, DOI: 10.1109/ECAI.2017.8166470, EID: 2-s2.0-85043302009, IEEE.

Vis24. Suciu, G., Bezdedeanu, L., Ganaside, A., & **Vochin**, M. (2017). Space technologies for disaster early warning and management. In International Black Sea Conference on Communications and Networking. istanbul. Retrieved from http://blackseacom2017.ieee-blackseacom.org/, WOS:000427892400057, ISBN:978-1-5090-5049-9, ISSN: 2375-8236, DOI: 10.1109/BlackSeaCom.2017.8277713, EID: 2-s2.0-85050740968, IEEE.

Vis25. Suciu, G., Scheianu, A., & **Vochin**, M. (2017). Disaster Early Warning using Time-Critical IoT on Elastic Cloud Workbench. In International Black Sea Conference on Communications and Networking. Retrieved from http://blackseacom2017.ieee-blackseacom.org/, WOS:000427892400056, ISBN:978-1-5090-5049-9, ISSN: 2375-8236, DOI: 10.1109/BlackSeaCom.2017.8277712, EID: 2-s2.0-85050736478, IEEE.

Vis26. Vochin, M., Vulpe, A., Suciu, G., & Boicescu, L. (2017). Intelligent displaying and alerting system based on an integrated communications infrastructure and low-power technology. In WorldCist'17 - 5th World Conference on Information Systems and Technologies. Porto Santo Island, Madeira, Portugal, 11 - 13 April 2017. WOS:000425541200014, ISBN:978-3-319-56538-5; 978-3-319-56537-8, ISSN: 2194-5357, eISSN: 2194-5365, https://doi.org/10.1007/978-3-319-56538-5_14.

Vis27. Vochin, M., Zoican, S., & Borcoci, E. (2017). Intelligent System for Vehicle Navigation Assistance. In WorldCist'17 - 5th World Conference on Information Systems and Technologies. Porto Santo Island, Madeira, Portugal, 11 - 13 April 2017, ISBN:978-3-319-56538-5; 978-3-319-56537-8, ISSN: 2194-5357, eISSN: 2194-5365, DOI: 10.1007/978-3-319-56538-5_15, EID: 2-s2.0-85018544489, WOS:000425541200015.

Vis28. George Suciu, **Marius Vochin**, Alexandru Vulpe, O. F. (2016). Vehicular Mobile Data Collection Platform to Support the Development of Intelligent Transportation Systems. In 24th Telecommunications Forum TELFOR 2016. Belgrade. Retrieved from http://www.telfor.org.rs/, DOI 10.1109/TELFOR.2016.7818753, WOS:000393491700043, IEEE.

Vis29. Marius Vochin, Eugen Borcoci, Serban Georgica Obreja, Jordi Mongay Batalla, & Daniel Negru. (2016). Performance Analysis of an Adaptive Media Content Streaming System. In The 11th International Conference on COMMUNICATIONS COMM 2016. Bucharest. https://doi.org/10.1109/ICComm.2016.7528320, WOS:000383221900032, IEEE

Vis30. Suciu, G., Butca, C., Conu, R., Suciu, V., Hristea, G., **Vochin, M.**, & Todoran, G. (2016). Rapid Detection of Pesticide Residues based on Telemetry Platform. In International Symposium on Electronics and Telecommunications 2016. Timisoara. Retrieved from http://conference.etc.upt.ro/isetc2016/, DOI 10.1109/ISETC.2016.7781065. WOS:000390717800022, IEEE.

Vis31. Suciu, G., **Vochin, M.**, Diaconu, C., Suciu, V., & Butca, C. (2016). Convergence of Software Defined Radio: WiFi, iBeacon and ePaper. In 15th RoEduNet Conference: Networking in Education and Research. bucharest. Retrieved from http://conference.roedu.net/index.php/roedunetconf/2016, WOS:000390713800050, DOI 10.1109/RoEduNet.2016.7753249, ISBN: 978-1-5090-5398-8, ISSN: 2247-5443, IEEE

Vis32. Zoican, S., **& Vochin, M.** (2016). Computing system and network architectures in high frequency trading financial applications. In 2016 International Conference on Communications (COMM). Bucuresti. WOS:000383221900030, https://doi.org/10.1109/ICComm.2016.7528289, IEEE

Vis33. Zoican, S., **Vochin, M.**, Zoican, R., & Galatchi, D. (2016). Lane Departure Warning System Implementation using the Blackfin Microcomputer. In 2016 12th IEEE International Symposium on Electronics and Telecommunications (ISETC). Timisoara. Retrieved from http://conference.etc.upt.ro/isetc2016/, WOS:000390717800002, IEEE

Vis34. Embedded Content Aware Router Implementation using the Blackfin Microcomputer. Sorin Zoican, **Marius Vochin**, Roxana Zoican, Dan Galatchi, International Symposium on Electronics and Telecommunications ETC 2014. Eleventh Edition, IEEE conference #33953, WOS:000366633300051.

Vis35. On Implementing Packet Inspection using CUDA Enabled Graphical Processing Units. Sorin Zoican, **Marius Vochin**, Bucharest, COMM 2014 International Conference, 2014, pp. 1 – 6, INSPEC Accession Number 14484810, WOS:000345844600005, IEEE.

Vis36. Scalability Analysis Of A Media Aware Network Element. **Marius Vochin**, Eugen Borcoci, Dragoş S. Niculescu, Mihai Stanciu, Bucharest, 2012. 20th European Signal Processing Conference EUSIPCO 2012. pg. 2213-2217, ISSN: 2219-5491, ISBN: 978-1-4673-1068-0, WOS:000310623800445, IEEE.

Vis37. LwIP Stack Protocol For Embedded Sensors Network, Sorin Zoican, **Marius Vochin**, COMM 2012 International Conference, Bucharest, pp. 221 – 224, Print ISBN: 978-1-4577-0057-6, WOS:000307808200051, IEEE.

Vis38. Implementation of a Media Aware Network Element for Content Aware Networks. Dragoş S. Niculescu, Mihai Stanciu, **Marius Vochin**, Eugen Borcoci. Budapest, Hungary, April 17-22, 2011, The Fourth International Conference on Communication Theory, Reliability, and Quality of Service, CTRQ 2011, pp 2213 – 2217, ISSN: 2308-4022, ISBN: 978-1-61208-126-7, WOS:000395118200014.

Vi - Volumele unor manifestări ştiinţifice internaţionale recunoscute, organizate in ţară şi străinătate:

Vi1. Eugen Borcoci, Marius Vochin, Serban Georgica Obreja, On Business Models for Vehicle-to-Everything Systems Based on 5G Slicing, The Sixteenth International Conference on Networking and Services ICNS 2020, September, 2020, Lisbon, Portugal

Vi2. Borcoci, E., Obreja, S., **& Vochin, M.** (2017). Internet of Vehicles Functional Architectures - Comparative Critical Study. The Ninth International Conference on Advances in Future Internet AFIN 2017. September 10 - 14, 2017 - Rome, Italy. **Best Paper Award,** ISSN: 2308-4340, ISBN: 978-1-61208-583-8.

Vi3. Borcoci, E., Ambarus, T., **& Vochin, M.** (2017). Distributed Control Plane Optimization in SDN-Fog VANET. In *The International Symposium on Advances in Software Defined Networking and Network Functions Virtualization, SOFTNETWORKING 2017*. Venice: IARIA. Retrieved from https://www.iaria.org/conferences2017/SOFTNETWORKING.html, **Best Paper Award,** pp 124-130.

Vi4. Eugen Borcoci, Tudor Ambarus, **M. Vochin**. (2016). Multi-criteria based Optimization of Placement for Software Defined Networking Controllers and Forwarding Nodes. In The Fifteenth International Conference on Networks ICN 2016. Lisbon: IARIA, ISSN: 2308-4413, ISBN: 978-1-61208-450-3

Vi5. Serban Georgica Obreja, Radu Iorga, Eugen Borcoci, Cristian Cernat, **Marius Vochin**, Jordi Mongay Batalla, Daniel Negru, J. B.-Q. (2016). Over the Top Content Streaming Adaptive System - Implementation and Validation. In The Ninth International Conference on Communication Theory, Reliability, and Quality of Service CTRQ 2016. Lisbon: IARIA, ISSN: 2308-4022, https://www.thinkmind.org/index.php?view=article&articleid=ctrq_2016_1_30_70013, pp 12-17.

Vi6. Borcoci, E., Ambarus, T., **& Vochin, M.** (2015). On Multi-controller Placement Optimization in Software Defined Networking - based WANs. In The Fourteenth International Conference on Networks ICN 2015 (pp. 261–266). ISSN: 2308-4413, ISBN: 978-1-61208-398-8, https://www.thinkmind.org/download.php?articleid=icn_2015_11_40_96028

Vi7. Lidia Dobrescu, Armand Ropot, Cezar Plesca, **Marius Vochin**, S. S. (2015). Implementing a New System for Recording the Effective Doses for Patients Investigated by Radiological Imaging Investigations. In Innovation and Sustainability International Scientific Conference Interdisciplinary approach of innovation as a progress factor (pp. 5–9). Bucharest: Editura Niculescu. https://doi.org/ISSN 2501-6695

Vi8. Multi-controller Scalability in Multi-domain Content Aware Networks Management. Eugen Borcoci, Mihai Constantinescu, **Marius Vochin**. Chamonix, France, The Tenth International Conference on Networking, ICNS 2014, pp. 62-68, ISSN: 2308-4006, ISBN: 978-1-61208-330-8, **Best Paper Award**.

Vi9. On Server and Path Selection Algorithms and Policies in a light Content-Aware Networking Architecture, Eugen Borcoci. **Marius Vochin**. Mihai Constantinescu, Jordi Mongay Batalla, Daniel Negru, 2014 International Conference on Networks & Soft Computing (ICSNC), Nice, France, ISSN: 2163-9027, ISBN: 978-1-61208-368-1

Vi10. Quality of Service Assurance in Multi-domain Content-Aware Networks for Multimedia Applications. **Marius Vochin**. Eugen Borcoci, Serban Georgica Obreja, Cristian Cernat, Radu Badea, Vlad Poenaru, Seville, Spain, 2014. The Sixth International Conference on Evolving Internet, pp. 9-14, INTERNET 2014, ISSN: 2308-443X, ISBN: 978-1-61208-349-0. **Best Paper Award**.

V. BREVETE DE INVENȚIE / INOVAȚII (B,A)

VI. CONTRACTE ȘI RAPOARTE ȘTIINȚIFICE (P,F)

P – Proiecte de cercetare-dezvoltare

Pi1. Project leader al "A Massive MIMO Enabled IoT Platform with Networking Slicing for Beyond 5G IoV/V2X and Maritime Services" – SOLID-B5G, Norway Grants 2014-2021, Project contract no. 42/2021, grant RO-NO-2019-0499, 1.2 M euros budget, 7 parteneri.

Membru echipa in proiecte internationale:

Pi2. PREdictive maintenance for Valuable ENergy efficiency acTIONs, Call name: P 3 - SP 3.5 - Proiecte EUREKA Tradițional (Network), EUREKA-Cluster, Eurostars, PN-III-P3-3.5-EUK-2019-0247 2021- 2023, valoare totala contract 2.041.880.00 lei. Project partners: SOCIETATEA DE INGINERIE SISTEME * SIS S.A. (RO); BEIA CONSULT INTERNATIONAL S.R.L. (RO)

Pi3. Smart ai based storage system, ERANET-REGSYS-AISTOR, 2020-2023, total buget 1.210.001,00 RON, Coordinator: BEIA CONSULT INTERNATIONAL

Pi4. Membru in echipa de implementare a proiectului FarmSustainaBl nr. 119/2019, **ERA-NET ERA-GAS / ICT-AGRI / SusAn** joint call, 2019-2022, BEAM Innovation S.R.L.

Pi5. Membru Smart ai based storage system, ERANET-REGSYS-AISTOR, 2020-2023, total buget 1.210.001,00 RON, Coordinator: BEIA CONSULT INTERNATIONAL

Pi6. Membru echipa proiect European **Celtic-Plus** CLOUDBOOK - A Cloud-aware distributed parallel compiler, ID: C2016/2-4, Budget (total): 3707 K€, Effort: 53.7 PY, 2018-2020, 7 parteneri.

Pi7. "Radiowave propagation in heterogeneous media: implications on the electronics of Cosmic Neutrino Detectors" - ERC 2016 Starting Grants, 24 luni, coordinator dr. ing. Alina Badescu.

Pi8. Proiectul european **CHIST-ERA**, „Service and user-based **DI**stributed **SE**lection of content streaming source and **D**ual **A**daptatio**N**" (DISEDAN), contract nr. 3_CHIST-ERA/06.01.2014, director de proiect prof. dr. ing. Eugen Borcoci.

Pi9. Proiectul european **FP7**, "Medi**A** Ecosystem Dep**L**oyment Through Ub**I**quitous **C**ontent-**A**ware **N**e**T**work **E**nvironments" (ALICANTE) grant nr. 248652 , 2010-2013, director de proiect prof. dr. ing. Eugen Borcoci.

Pi10. Proiectul european **FP6-IP**, "End-to-End QoS through Integrated Management of Content, Networks and Terminals", (ENTHRONE II), Nr. 038463, 2006-2008, director de proiect prof. dr. ing. Eugen Borcoci.

Proiecte nationale

Pn1. Postdoctoral researcher - "Optimizing performance in resource allocation, location and migration of virtualized functions in 5G technologies with parallel virtual networks", SDETTI UPB, 2019-2021.

Pn2. Project leader al **UEFISCDI** PN-III-P2-2.1-CI-2018-1562 "Sistem inteligent de monitorizare a coloniilor de albine" (Intelligent Hive Colony Monitoring System- SIMCA), Nr. Contract 270CI/2018, buget 50000 lei.

Pn3. Project leader al **UEFISCDI PN-III-P2-2.1-BG-2016-0475** grant nr. 60BG/2016 "Intelligent communications system based on integrated infrastructure, with dynamic display and alerting - SICIAD", competitia Bridge Grant (Transfer de cunoastere la agentul economic), 2016-2018, buget 460000.

Pn4. Project leader al proiectului de cercetare "Intelligent Navigation Assistance System", Contract nr. 101/26.09.2016 (acronym: SIAN), finantat prin programul "Excellence Research Grants", UPB – GEX. Identifier: **UPB–EXCELENȚĂ**–2016, 2016-2017.

Membru echipa in proiecte internationale:

Pn5. Postdoctoral research grant „Dezvoltarea competențelor de antreprenoriat ale doctoranzilor și postdoctoranzilor – cheie a succesului în carieră (A-Succes)", POCU 380/6/13, contract nr. 51675/09.07.2019 - cod SMIS: 125125, 2019-2021.

Pn6. Membru echipa implementare proiect "Creşterea competitivităţii inovative a SC AdNet Market Media prin investiţii iniţiale de inovare, in scopul realizării unei platforme tehnologice SmartDelta, în cadrul unei unităţi nou înfiinţate pentru realizarea activităţilor CD în colaborare efectivă" (SmartDelta). Cod SMIS 2014+:121884. POC nr. 279/25.06.2020

Pn7. Membru proiect - Tehnologii pentru retele si servicii de comunicatii din generatia a 5-a, Orange Romania, 13930/14/08/2018, 2018, 3 luni, parteneri Orange Romania si UPB.

Pn8. Mediu Inteligent pentru Locuinţa Asistată Folosind Unde RADIO, coordinator dr. eng. Alexandru Tatomirescu. **GNaC2018 ARUT**.

Pn9. PaSS-IoT - nr contract EL07.16.11, **UPB–EXCELENŢĂ**–2016, manager dr. eng. Alexandru Vulpe.

Pn10. Proiectul naţional **UEFISCDI**, „New Innovative System for Radiation Safety of Patients Investigated by Radiological Imaging Methods, based on Smart Cards and PKI Infrastructures" (SRSPIRIM), contract Nr187/2012, director de proiect conf. dr. ing. Lidia Dobrescu.

Pn11. Proiectul naţional **OI POSDRU**/161/2.1/G/135813 PRACSIS – „Parteneriat pentru o carieră de succes în domeniul securităţii informaţiilor şi a sistemelor informatice", nr 135813, director de proiect Prof. dr. ing. Petru-Lucian MILEA.

Pn12. Proiectul naţional **POSDRU**/90/2.1/S/62591 "Practicanţii de azi, profesioniştii de mâine ai televiziunilor!", coordonator proiect: Prof. dr. ing. Corneliu BURILEANU

F – Alte lucrări de cercetare – dezvoltare

F1 *ALICANTE Deliverable D8.3: Trials and Validation*; Published on 18/09/2013; Zhang Yanping (ed.). .... **M. Vochin**; http://www.ict-alicante.eu/validation/delivrables/

F2 *ALICANTE Deliverable D8.2: The ALICANTE Pilot Integration;* Published on 15/09/2013; Roger Salgado (ed.). ..., **M. Vochin**; http://www.ict-alicante.eu/validation/delivrables/

F3 *ALICANTE Deliverable D8.1: Use Cases and Validation Methodology;* Published on September 16, 2013; Mamadou Sidibé (VIOTECH) (ed.), ..., **M. Vochin**; http://www.ict-alicante.eu/validation/delivrables/

F4 *ALICANTE Deliverable* D6F: The ALICANTE CAN and Network Environment, Published on May 31, 2013; Eugen Borcoci (UPB) (ed.), ..., **M. Vochin**; http://www.ict-alicante.eu/validation/delivrables/

F5 *ALICANTE Deliverable D6.1.1: Content-Aware Network Infrastructure and Elements – Intermediate;* Submitted on 30/09/2011; Anne-Lore Mevel (TH-VN), ..., **M. Vochin**; http://www.ict-alicante.eu/validation/delivrables/

VII. COMUNICĂRI ŞTIINŢIFICE NEPUBLICATE (E)

E1. Prezentare „Sistem inteligent monitorizare apicola", Targul Cercetatorilor - CNMB 100, 2020.
E2. Plenary Lecture: "Automotive Navigation Assistance Systems", 8th International Conference on AUTOMOTIVE and TRANSPORTATION SYSTEMS (ICAT '17), Braşov, Romania June 27-29, 2017
E3. Premiul II la Sesiunea de Comunicări Ştiinţifice Studenţeşti, mai 2009.

VIII. Rezultate relevante pentru aprecierea activităţii ştiinţifice

WorldCist'18 **preşedinte si co-organizator workshop internaţional** ERLANG - Emerging Trends, Challenges and Solutions in Infrastructures and Smart Building Management
5 premii **best paper** obţinute la conferinţe internaţionale de profil.
Chairman la 5 conferinţe internaţionale de profil si peste 53 **recenzii** confirmate publons.
Membru în **comitetul de program** la 4 conferinţe ISI, si **referent ştiinţific** la 6 reviste ISI internaţionale de profil.
Membru în **editorial board al** revistelor ştiinţifice internaţionale: International Journal of Future Generation Communication and Networking (IJFGCN), https://nadiapub.com/journals/ijfgcn/ijfgcn-editorial-board/, American Journal of Networks and Communications. http://www.sciencepublishinggroup.com/journal/editorialboard?journalid=132 .
Membru în **organizaţii ştiinţifice/profesionale** internaţională: IEEE member 93213874, IEEE Young Professionals, Association of Advanced Materials (IAAM), EAI - European Alliance for Innovation, UEFISCDI BrainMap.
Partener **Red Hat Academy**
158 **citări**, **h-index** 7, **i10-index** 3