

Lista completă de lucrări

A. Lista celor 10 lucrări relevante

1. Gábor Lencse, **Szabolcs Szilágyi**, *Equivalence and difference of the dual device under test setup and the single device under test setup of RFC 8219*, International Journal of Communication Systems, Vol. 38, Issue 3, pp. 1-15, ISSN 1099 – 1131, DOI: 10.1002/dac.5982, Wiley, 2025.
Scopus: <https://www.scopus.com/pages/publications/85204533654>
Wos: <https://www.webofscience.com/wos/woscc/full-record/WOS:001317906000001>
2. **Szabolcs Szilágyi**, *Effective Supervision of Students' Activity During Classroom Learning and Testing*, Acta Cybernetica, Vol. 27, No. 1, pp. 43-51, ISSN 0324 – 721X, DOI: 10.14232/actacyb.307809, 2025.
Scopus: <https://www.scopus.com/pages/publications/105001695754>
WoS: <https://www.webofscience.com/wos/alldb/full-record/WOS:001472320800004>
3. **Szabolcs Szilágyi**, Imre Bordán, Investigating the Throughput Performance of the MPT-GRE Network Layer Multipath Library in Emulated WAN Environment, Acta Tech. Jaurinensis, Vol. 15, No. 1, pp. 7-14, ISSN: 2064-5228, 2021.
Scopus: <https://www.scopus.com/pages/publications/85146437848>
4. **Szabolcs Szilágyi**, Imre Bordán, Lajos Harangi, Benjámín Kiss, *Throughput Performance Analysis of the Multipath Communication Technologies for the Cloud*, Journal of Electrical and Electronics Engineering, Vol. 12, No. 2, pp. 69-72, ISSN: 1844-6035, 2019.
Scopus: <https://www.scopus.com/pages/publications/85077682431>
5. **Szabolcs Szilágyi**, Imre Bordán, Lajos Harangi, Benjámín Kiss, *Throughput Performance Comparison of MPT-GRE and MPTCP in the Gigabit Ethernet IPv4/IPv6 Environment*, Journal of Electrical and Electronics Engineering, Vol. 12, No. 1, pp. 57-60, ISSN: 1844-6035, 2019.
Scopus: <https://www.scopus.com/pages/publications/85070212823>
6. **Szabolcs Szilágyi**, Ferenc Fejes, Róbert Katona, *Throughput Performance Comparison of MPT-GRE and MPTCP in the Fast Ethernet IPv4/IPv6 Environment*, Journal of Telecommunications and Information Technology, Vol. 3, No. 2, pp. 53-59, ISSN: 1509-4553, DOI: 10.26636/jtit.2018.122817, 2018.
Scopus: <https://www.scopus.com/pages/publications/85049243886>
7. Béla Almási, Gábor Lencse, **Szabolcs Szilágyi**, *Investigating the Multipath Extension of the GRE in UDP Technology*, Computer Communications, Vol. 103, pp. 29-38, ISSN 0140-3664, DOI: 10.1016/j.comcom.2017.02.002, 2017.
Scopus: <https://www.scopus.com/pages/publications/85013093023>
WoS: <https://www.webofscience.com/wos/woscc/full-record/WOS:000399509700003>

8. **Szabolcs Szilágyi**, *The Effects of Different Congestion Management Algorithms over VoIP Performance*, International Journal of Advanced Computer Science and Applications, Vol. 6, No. 2, pp. 66-70, ISSN 2156-5570 (Online Version) , ISSN 2158-107X (Print), DOI: 10.14569/IJACSA.2015.060210, 2015.
Scopus: <https://www.scopus.com/sourceid/21100867241>
WoS: https://mjl.clarivate.com:/search-results?issn=2158-107X&hide_exact_match_fl=true&utm_source=mjl&utm_medium=share-by-link&utm_campaign=search-results-share-this-journal
9. **Szabolcs Szilágyi**, *Weighted Scheduling in Multipath GRE-in-UDP: Mathematical Modeling and Experimental Analysis*, Proceedings of the 18th International Conference on Engineering of Modern Electric Systems (EMES 2025), IEEE, pp. 1-4, DOI: 10.1109/EMES65692.2025.11045626, Oradea, Romania, May 29-30, 2025.
Scopus: <https://www.scopus.com/pages/publications/105010457808>
10. **Szabolcs Szilágyi**, László Kovács, *Testing MPT-GRE Multipath Solution in Vehicular Network V2I Communication*, Proceedings of the 2nd Conference on Information Technology and Data Science (CITDS 2022), IEEE, Vol. 2874, pp. 253-256, DOI: 10.1109/CITDS54976.2022.9914181, Debrecen, Hungary, May 16-18, 2022.
Scopus: <https://www.scopus.com/pages/publications/85140970106>

B. Teza de doctorat

1. **Szabolcs Szilágyi**, *Infokommunikációs hálózatok hatékonyságvizsgálata (Performance Analysis of Infocommunication Networks, Analiza de performanță a rețelelor de infocomunicații)*, Debrecen, 2015.
Internet: <http://hdl.handle.net/2437/208375>

C. Brevete de invenție și alte titluri de proprietate industrială

1. Gábor Lencse, **Szabolcs Szilágyi**, Ferenc Fejes, Marius Georgescu, *MPT Network Layer Multipath Library*, IETF Network Working Group, **Internet Draft**, March 23, 2025, draft-lencse-tsvwg-mpt-11.txt
Internet: <https://datatracker.ietf.org/doc/html/draft-lencse-tsvwg-mpt-11>

D. Cărți și capitole în cărți publicate pe web

1. *Számítógépes hálózatok – laborgyakorlati segédlet levelezős hallgatók részére*, A tananyag elkészítését az EFOP 3.4.3-16-2016-00021 számú projekt támogatta. A projekt az Európai Unió támogatásával, az Európai Szociális Alap társfinanszírozásával valósult meg, 169 dia, Debrecen, 2020.

2. **Számítógépes hálózatok – előadás diáor levelezős hallgatók részére**, A tananyag elkészítését az EFOP 3.4.3-16-2016-00021 számú projekt támogatta. A projekt az Európai Unió támogatásával, az Európai Szociális Alap társfinanszírozásával valósult meg, 312 dia, Debrecen, 2021.
3. **Hálózati eszközök programozása 1-2 – egyetemi jegyzet mérnökinformatikus BSc hallgatók részére**, A tananyag elkészítését az EFOP 3.4.3-16-2016-00021 számú projekt támogatta. A projekt az Európai Unió támogatásával, az Európai Szociális Alap társfinanszírozásával valósult meg, 93 oldal, Debrecen, 2021.
4. **Cloud Computing Quiz – AZ-900 ipari vizsgára felkészítő angol nyelvű tesztkérdések hallgatók részére**, A tananyag elkészítését az EFOP 3.4.3-16-2016-00021 számú projekt támogatta. A projekt az Európai Unió támogatásával, az Európai Szociális Alap társfinanszírozásával valósult meg, 75 oldal, Debrecen, 2021.
5. **Számítógépes hálózatok – îndrumător de laborator** – 2 capitole, Universitatea din Debrecen, 2021.

E. Articole/studii publicate în reviste din fluxul științific internațional principal

1. Szabolcs Szilágyi, *Effective Supervision of Students' Activity During Classroom Learning and Testing*, Acta Cybernetica, Vol. 27, No. 1, pp. 43-51, ISSN 0324 – 721X, DOI: 10.14232/actacyb.307809, 2025.
2. Gábor Lencse, Szabolcs Szilágyi, *Equivalence and difference of the dual device under test setup and the single device under test setup of RFC 8219*, International Journal of Communication Systems, Vol. 38, Issue 3, pp. 1-15, ISSN 1099 – 1131, DOI: 10.1002/dac.5982, Wiley, 2025.
3. Szabolcs Szilágyi, Laura Juhász, *Increasing Teacher Efficiency with AI: An Overview*, Journal of Computer Science and Control Systems, Vol. 17, No. 2, pp. 9-14, ISSN 1844 – 6043, University of Oradea Publisher, Oradea, 2024.
4. Szabolcs Szilágyi, Imre Bordán, *Investigating the Throughput Performance of the MPT-GRE Network Layer Multipath Library in Emulated WAN Environment*, Acta Tech. Jaurinensis, Vol. 15, No. 1, pp. 7-14, ISSN: 2064-5228, 2021.
5. Szabolcs Szilágyi, Imre Bordán, Lajos Harangi, Benjámín Kiss *Throughput Performance Analysis of the Multipath Communication Technologies for the Cloud*, Journal of Electrical and Electronics Engineering, Vol. 12, No. 2, pp. 69-72, ISSN: 1844-6035, 2019.
6. Szabolcs Szilágyi, Imre Bordán, Lajos Harangi, Benjámín Kiss *Throughput Performance Comparison of MPT-GRE and MPTCP in the Gigabit Ethernet IPv4/IPv6 Environment*, Journal of Electrical and Electronics Engineering, Vol. 12, No. 1, pp. 57-60, ISSN: 1844-6035, 2019.

7. **Szabolcs Szilágyi**, Ferenc Fejes, Róbert Katona, *Throughput Performance Comparison of MPT-GRE and MPTCP in the Fast Ethernet IPv4/IPv6 Environment*, Journal of Telecommunications and Information Technology, Vol. 3, No. 2, pp. 53-59, ISSN: 1509-4553, DOI: 10.26636/jtit.2018.122817, 2018.
8. Béla Almási, Gábor Lencse, **Szabolcs Szilágyi**, *Investigating the Multipath Extension of the GRE in UDP Technology*, Computer Communications, Vol. 103, pp. 29-38, ISSN 0140-3664, DOI: 10.1016/j.comcom.2017.02.002, 2017.
9. Béla Almási, **Szabolcs Szilágyi**, *Investigating the Performance of the MPT Multipath Communication Library in IPv4 and IPv6*, International Journal of Advances in Telecommunications, Electrotechnics, Signals and Systems, Vol. 5, No. 1, pp. 53-60, ISSN 1805-5443, DOI: 10.11601/ijates.v5i1.148, 2016.
10. **Szabolcs Szilágyi**, *The Effects of Different Congestion Management Algorithms over VoIP Performance*, International Journal of Advanced Computer Science and Applications, Vol. 6, No. 2, pp. 66-70, ISSN 2156-5570 (Online Version) , ISSN 2158-107X (Print), DOI: 10.14569/IJACSA.2015.060210, 2015.
WoS: <https://www.webofscience.com/wos/woscc/full-record/WOS:000357579200010>
11. Béla Almási, **Szabolcs Szilágyi**, *Multipath FTP and Stream Transmission Analysis using the MPT Software Environment*, International Journal of Advanced Research in Computer and Communication Engineering, Vol. 2, Issue 11, pp. 4267-4272, ISSN 2278 – 1021 (Online Version) , ISBN 2319 – 5940 (Print), November, 2013.
12. **Szabolcs Szilágyi**, *Analysis of the Algorithms for Congestion Management in Computer Networks*, Carpathian Journal of Electronic and Computer Engineering, Vol. 6, No. 1, pp. 3-7, ISSN 1844 – 9689, North University of Baia Mare, Faculty of Engineering, Electrical Engineering Department, Baia Mare, 2013.
13. **Szabolcs Szilágyi**, Béla Almási, *A Review of Congestion Management Algorithms on Cisco Routers*, Journal of Computer Science and Control Systems, Vol. 5, No. 1, pp. 103-107, ISSN 1844 – 6043, University of Oradea Publisher, Oradea, 2012.
14. Daniela E. Popescu, Daniel Filipaş, **Szabolcs Szilágyi**, *Some Aspects about a Self-Testing Solution for Implementing the TCP/IP Protocol*, Journal of Computer Science and Control Systems, Vol. 1, No. 1, pp. 82-87, ISSN 1844 – 6043, University of Oradea Publisher, Oradea, 2008.

F. Publicații apărute în lucrări ale principalelor conferințe internaționale de specialitate

1. **Szabolcs Szilágyi**, *Weighted Scheduling in Multipath GRE-in-UDP: Mathematical Modeling and Experimental Analysis*, Proceedings of the 18th International Conference on Engineering of Modern Electric Systems (EMES 2025), IEEE, pp. 1-4, DOI: 10.1109/EMES65692.2025.11045626, Oradea, Romania, May 29-30, 2025.
2. **Szabolcs Szilágyi**, Imre Bordán, *Throughput Performance Measurement of the MPT-GRE Multipath Technology in Emulated WAN Environment*, Proceedings of the 1st Conference on Information Technology and Data Science (CITDS 2020), Vol. 2874, pp. 187-195, ISSN 1613-0073, Debrecen, Hungary, November 6-8, 2020.
3. **Szabolcs Szilágyi**, Imre Bordán, *The Effects of Different Congestion Control Algorithms over Multipath Fast Ethernet IPv4/IPv6 Environments*, Proceedings of the 11th International Conference on Applied Informatics (ICAI 2020), Vol. 2650, pp. 341–349, ISSN 1613-0073, Eger, Hungary, January 29-31, 2020.
4. **Szabolcs Szilágyi**, Imre Bordán, Lajos Harangi, Benjámin Kiss, *MPT-GRE: A Novel Multipath Communication Technology for the Cloud*, 9th IEEE International Conference on Cognitive Infocommunications : CogInfoCom 2018 Proceedings, pp. 81–86, DOI: 10.1109/CogInfoCom.2018.8639941, Piscataway (NJ), Amerikai Egyesült Államok : IEEE Computational Intelligence Society, 22-24 August, 2018.
WoS: <https://www.webofscience.com/wos/woscc/full-record/WOS:000460787000013>
5. Imre Varga, **Szabolcs Szilágyi**, *Mintatantervek és a hálózattudomány, vagyis az előfeltételi hálóak tulajdonságai (Curriculums and the networks science that is the properties of preconditional subject networks)*, Informatika a felsőoktatásban 2017, pp. 167–173, ISBN 978-963-473-213-6, University of Debrecen Faculty of Informatics Publisher, Hungary, August 29-31, 2017.
6. **Szabolcs Szilágyi**, *Multiway Switching Controller Design using FPGA*, Proceedings of the 9th International Conference on Applied Informatics, Vol. 2, pp. 57–63, DOI: 10.14794/ICAI.9.2014.2.57, Eger, Hungary, January 29–February 1, 2014.
7. **Szabolcs Szilágyi**, *The Effects of Different Queuing Techniques over VoIP Performance: A Simulation Approach*, Abstracts & Pre-Proceedings of the 9th International Conference on Applied Mathematics, pp. 99-103, ISBN 978-606-93094-8-3, BiblioPhil Publisher, 25-28 September, 2013, Baia Mare, Romania.
8. Béla Almási, **Szabolcs Szilágyi**, *Throughput Performance Analysis of the Multipath Communication Library MPT*, TSP 2013 – The 36th International Conference on Telecommunications and Signal Processing, pp. 86-90, ISBN 978-1-4799-0402-0, DOI: 10.1109/TSP.2013.6613897, 2-4 July, 2013, Rome, Italy.
WoS: <https://www.webofscience.com/wos/woscc/full-record/WOS:000333968000019>