

**x`Szántó Zoltán**  
**Lista de publicații**

**A. Teza de doctorat**

Advanced techniques for remote control of mobile robots

Universitatea Tehnică din Cluj-Napoca, 2016

Calificativ: foarte bine

**B. CĂRȚI**

**B5. Capitole de cărți publicate în străinătate**

[B5-3] Lőrinc Marton, Piroska Haller, Tamas Szabó, Hunor Sándor, Tamás Vajda, and **Zoltán Szántó**, Network Controller for Teleoperated Mobile Robotic Agents, Springer Lecture Notes in Advances in Intelligent Systems and Computing, Vol. 301, 2016, pp. 14371450, ISBN 978-3-319-08334-6.

[B5-2] Piroska Haller, Lőrinc Márton, **Zoltán Szántó** and Tamás Vajda, Bilateral Teleoperation in the Presence of Jitter: Communication Performance Evaluation and Control, in Handling Uncertainty and Networked Structure in Robot Control, Eds. L. Busoniu, L. Tamás, Vo.42 -Studies in Systems, Decision and Control, 2015, pp.291-311. ISBN:978-3-319-26327-4

[B5-1] **Zoltán Szántó**, Lőrinc Márton, Sebestyén György, Supervised Robot Groups with Reconfigurable Formation: Theory and Simulations, Springer Lecture Notes in Computer Science, Vol. 8575, 2014, pp. 280-289. ISBN 978-3-319-08863-1.

**C. Lucrări științifice publicate**

**C1. Lucrări științifice publicate în reviste cotate ISI**

[C1-3] Hunor Sándor, Béla Genge, **Zoltán Szántó**, Lőrinc Márton, Piroska Haller, Cyber attack detection and mitigation: Software Defined Survivable Industrial Control Systems, International Journal of Critical Infrastructure Protection, Volume 25, pp. 152-168, 2019. (IF: 2.225)

[C1-2] Lőrinc Márton, **Zoltán Szántó**, Tamás Haidegger, Péter Galambos, and József Kövecses, Internet-based Bilateral Teleoperation Using a Revised Time-Domain Passivity Controller, Acta Polytechnica Hungarica, Vol. 14, No. 8, 2017, pp. 27-45. (IF: 1.28)

[C1-1] Lőrinc Márton, Piroska Haller, Tamás Vajda, **Zoltán Szántó**, Hunor Sándor, Tamás Szabó, Data transfer regulator for wireless teleoperation, Transactions of the Institute of Measurement and Control, Vol. 38, pp. 141-149, 2016. (IF: 0.82)

**C2. Lucrări științifice publicate în reviste indexate în baze de date internaționale (indicați și baza de date).**

[C2-1] Lőrinc Márton, **Zoltán Szántó**, Piroska Haller, Tamás Szabó, Hunor Sándor, Tamás Vajda, Bilateral teleoperation of wheeled mobile robots working in common workspace,

## C6. Lucrări științifice publicate în volumele manifestărilor științifice

[C6-13] Hunor Sándor, **Zoltán Szántó**, Zsolt László Orbán, IoT-Driven Track Health Monitoring for Sustainable Railway Operations, 8th International Conference on Road and Rail Infrastructure (CETRA) 2024.

[C6-12] Adrienn Deák, **Zoltán Szántó**, Áron Fehér, Lőrinc Márton, Smartphone-controlled industrial robots: Design and user performance evaluation, IEEE 22nd International Symposium on Computational Intelligence and Informatics and 8th IEEE International Conference on Recent Achievements in Mechatronics, Automation, Computer Science and Robotics (CINTI-MACRo), 2022. (**IEEE Xplore**)

[C6-11] **Zoltán Szántó**, Hunor Sándor, Béla Genge, A Testbed for Performing Security Experiments with Software-Defined Industrial Control Systems, Proceedings of the Central European Cybersecurity Conference (CECC), 2018. (**ACM**)

[C6-10] Sándor Hunor, Genge Béla, **Szántó Zoltán**, Infrastructure and framework for response and reconfiguration in Industry 4.0, IEEE 6th International Symposium on Digital Forensic and Security (ISDFS), 2018. (**IEEE Xplore**)

[C6-9] Sándor Hunor, Genge Béla, **Szántó Zoltán**, Sensor data validation and abnormal behavior detection in the Internet of Things, Networking in Education and Research, IEEE 16th RoEduNet Conference, 2017. (**IEEE Xplore**)

[C6-8] **Zoltán Szántó**, Lőrinc Márton, György Sebestyén, Fazakas István, Target following approach for self-organized swarms based on color information, IEEE 16th International Symposium on Computational Intelligence and Informatics (CINTI), pp 317-321, 2015. (**IEEE Xplore**)

[C6-7] **Zoltán Szántó**, Lőrinc Márton, György Sebestyén, and Timotei István. Erdei, Investigation of robotic swarms with partial team-goal knowledge, IEEE 19th International Conference on Intelligent Engineering Systems, 2015. (**IEEE Xplore**)

[C6-6] Lőrinc Márton, Piroska Haller, Tamás Vajda, **Zoltán Szántó**, Nonlinear PI Rate Control in Bottleneck Links: Application to Teleoperation Systems, 5th IFAC Workshop on Distributed Estimation and Control in Networked Systems, 2015. (**IFAC-PapersOnline**)

[C6-5] Lőrinc Márton, **Zoltán Szántó**, Tamás Vajda, Piroska Haller, Hunor Sándor, Tamás Szabó and Levente Tamás, Communication Delay and Jitter Influence on Bilateral Teleoperation, IEEE 22nd Mediterranean Conference on Control and Automation, 014, pp. 1171 – 1177, 2014. (**IEEE Xplore**)

[C6-4] **Zoltán Szántó**, Lőrinc Márton, György Sebestyén, Teleoperated mobile robot groups with reconfigurable formation, IEEE 2014 International Conference on Autonomous Robot Systems and Competitions (ICARSC), pp.235-240, 2014. (**IEEE Xplore**)

[C6-3] Tamás Vajda, Lőrinc Márton, **Zoltán Szántó**, Piroska Haller, The Effect of JPEG Compression on Network Controller Desigened for Teleopearation System International Conference on Intelligent Computer Communication and Processing, ICCP 2014, Sept. 2014, pp. 315 - 318. (**IEEE Xplore**)

[C6-2] **Zoltán Szántó**, Lőrinc Márton, Piroska Haller, György Sebestyén, Performance analysis of WLAN based mobile robot teleoperation, IEEE 9th International Conference on Intelligent Computer Communication and Processing, Cluj Napoca, Romania, 2013, pp. 299–305. (**IEEE Xplore**)

[C6-1] H. Sandor, T. Szabo, T. Vajda, P. Haller, **Z. Szanto**, L. Marton, Video Supported Bilateral Teleoperation System: Design and Implementation, 14th IEEE International Symposium on Computational Intelligence and Informatics, Budapest, Hungary, 2013. (**IEEE Xplore**)

#### **Alte conferințe**

**Zoltán Szántó**, Robot control using q-learning. In: Scientific Bulletin of the Petru Maior University of Targu Mures 9.1 (2012). ISSN: 2285-438X

**Zoltán Szántó** and Lőrinc Márton, Generic framework for multi-robot formation control, In: 23th International Conference on Computers and Education (SZAMOKT). 2013, pp. 316–320, ISSN: 1842-4546

**Zoltán Szántó** and Haller Piroska, Mobile-robot control using Q-Learning algorithm, In: 21th International Conference on Computers and Education (SZAMOKT). 2011, pp. 268–274, ISSN: 1842-4546

#### **Data,**