Márton Lőrinc
Lista de lucrări

Cărti Monografii Internaționale (M)

[M1] Béla Lantos, **Lőrinc Márton**, *Nonlinear Control of Vehicles and Robots*, Springer, Series: Advances in Industrial Control, 458 pages, 2011, ISBN: 978-1-84996-121-9 (Library WorldCat: 432)

Capitole Monografii Internaționale (M)

[M2] **Lőrinc Márton,** Passive Bilateral Teleoperation with Safety Considerations, in, *Human-Robot Interaction: Safety, Standardization, and Benchmarking*, Eds. Paolo Barattini, Federico Vicentini, Gurvinder Singh Virk, Tamas Haidegger CRC Press, 2019, ISBN: 9781138626751

[M3] Piroska Haller, **Lőrinc Márton**, Zoltan Szanto and Tamas 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, 2016, pp. 291-311. ISBN: 978-3-319-26327-4. (Library WorldCat: 197)

[M4] **Lőrinc Márton**, Béla Lantos, *Friction Modeling and Adaptive Compensation for Intelligent DC Servo Control*, Intelligent systems in the service of mankind Vol. II, Editor: Wilfried Elmenreich, J. Terreiro Machado and Imre J. Rudas, U Books, Germany, pp. 15-25, 2005, ISBN: 978-3-866-08052-2.

Capitole Monografii Naționale (M)

[M4] **Lőrinc Márton,** Automation and Computer Science – The Contribution of Hungarian Researchers from Transylvania between 2002 and 2013, in *Hungarian Scientists in Romania 2002-2013 Vol. III*, Eds. J. Pentek, L. Salat, M. Szikszai, Abel, 2015, pp. 303-332, ISBN: 9781141961.

Cărți Didactice (D)

[D1] **Márton Lőrinc,** *Ingineria Reglării Automate*, Scientia, Cluj Napoca, România, 258 pagini, 2009, (în limba maghiară), ISBN: 9789731970134

[D2] Ágoston Katalin, Domokos József, **Márton Lőrinc**, *Senzori şi Traductoare – Îndrumător de laborator*, Editura Scientia, Cluj Napoca, România, 128 pagini, 2007. (în limba maghiară). ISBN 9789737953766

[D3] **Lőrinc Márton**, *Robust-Adaptive Control of Nonlinear Mechatronic Systems and Robots*, Lambert Academic Publishing, Germany, 164 pages, 2012, ISBN: 978-3-65929-159-3

[D4] **Márton Lőrinc,** Fehér Áron, *Ingineria Reglării Automate – Îndrumător de laborator*, Editura Scientia, Cluj Napoca, România, 102 pagini, 2019, eISBN: 978-606-975-023-0.

[D5] **Márton Lőrinc,** Fehér Áron, *Sisteme de conducere a roboților – Îndrumător de laborator*, Editura Scientia, Cluj Napoca, România, 168 pagini, 2024, ISBN 978-606-975-089-6

Reviste ISI (RISI)

[RISI–1] **L. Márton**, K. M Hangos, X–factorable transformation–based control of interconnected Lotka–Volterra systems, Mathematical biosciences and engineering: MBE, 23 (6), pp. 1774-1798, 2026

[RISI–2] K. M. Hangos, W. Kurniawan, **L. Márton,** Diffusive network connected chemical reaction networks, Systems Science & Control Engineering 13 (1), 2469615, 2025

[RISI–3] Á. Fehér, **L. Márton**, State and disturbance source estimation in Fisher–Kolmogorov equation, IFAC Journal of Systems and Control, 100314, 2025

[RISI–4] W. Kurniawan, **L. Márton**, Fault isolation with disturbance estimation in networks of linear dynamic systems, International Journal of Dynamics and Control 13 (5), 1-14, 2025

[RISI–5] **L. Márton**, K. M. Hangos, A. Magyar, Migration-connected networks of Lotka–Volterra and quasi-polynomial systems: modeling and decentralized control, Nonlinear Dynamics 113 (9), 10577-10596, 2025

[RISI–6] Kurniawan, W; Hangos, K M; **Márton, Lőrinc**, Fault Isolation and Estimation in Networks of Linear Process Systems, Entropy 25, 6, paper 862, 26 p., 2023.

[RISI–7] **Lőrinc Márton**, Gábor Szederkényi, Katalin M. Hangos, Modeling and control of networked kinetic systems with delayed interconnections, Journal of Process Control, Vol. 130, paper 103084, 2023.

[RISI–8] **Márton, Lőrinc**, Modeling and migration-based control of depopulation, Theoretical Population Biology, Vol. 148, pp. 86-94, 2022.

[RISI–9] Kurniawan, Wijaya, **Marton, Lorinc**, Sensor Faults Isolation in Networked Control Systems: Application to Mobile Robot Platoons, Sensors 21, 20 p, paper: 6702, 2021.

[RISI–10] **Lőrinc Márton,** Katalin Hangos, Attila Magyar, Passivity of Lotka–Volterra and quasi-polynomial systems, Nonlinearity, Vol. 34, No. 4 pp. 1880-1899, 2021.

[RISI–11] Áron Fehér, **Lőrinc Márton**, Approximation and control of a class of distributed delay systems, Systems & Control Letters, Vol. 149, p. 104882, 2021.

[RISI–12] Áron Fehér, **Lőrinc Márton**, Mihály Pituk, Asymptotically ordinary linear Volterra difference equations with infinite delay, *Applied Mathematics and Computation*, Vol. 386, 2020, p. 125499.

[RISI–13] Áron Fehér, **Lőrinc Márton**, Mihály Pituk, Approximation of a Linear Autonomous Differential Equation with Small Delay, *Symmetry*, Vol. 11, 2019, p. 1299.

[RISI–14] **Lőrinc Márton**, Switching control analysis and design in queue networks, *Journal of the Franklin Institute*, Vol. 357, No. 1, 2020, pp. 19-38.

[RISI–15] 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*, Vol. 25, 2019, pp. 152-168,

[RISI–16] **Lőrinc Márton**, Gábor Szederkényi, Katalin M. Hangos, Distributed control of interconnected Chemical Reaction Networks with delay, Elsevier *Journal of Process Control*, 2018, Vol. 71, pp. 52-62. **(Q2)**

[RISI–17] **Lőrinc Márton**, Zoltán Szántó, Tamás Haidegger, Péter Galambos, József Kövecses, Internet-based Bilateral Teleoperation Using a Revised Time-Domain Passivity Controller, *Acta Polytechnica Hungarica*, 2017, Vol. 14, No. 8, pp. 27-46.

[RISI–18] **Lőrinc Márton**, Piroska Haller, Tamás Vajda, Zoltán Szántó, Hunor Sándor, and Tamás Szabó, Data transfer regulator for wireless teleoperation, *Transactions of the Institute of Measurement and Control*, February 2016, Vol 38, pp. 141-149.

[RISI–19] **Lőrinc Márton**, Actuator Fault Diagnosis in Mechanical Systems - Fault Power Estimation Approach, *International Journal of Control, Automation and Systems*. Springer, Vol. 13, No. 1, pp. 110-119, 2015. **(Q2)**

[RISI–20] **Lőrinc Márton**, Franciscus van der Linden, Temperature dependent friction estimation: Application to lubricant health monitoring, Elsevier *Mechatronics*, Vol. 22, No. 8, pp. 1078-1084, December 2012. **(Q2)**

[RISI–21] **Lőrinc Márton**, Béla Lantos, Control of Robotic Systems with Unknown Friction and Payload, *IEEE Transactions on Control Systems Technology*, Vol. 19, No. 6, pp. 1534-1539, November, 2011. (**Q1**)

[RISI–22] **Lőrinc Márton**, Szabolcs Fodor, Nariman Sepehri, A Practical Method for Friction Identification in Hydraulic Actuators, *Mechatronics*, Elsevier, Vol. 21. No. 1, pp. 350-356 February 2011. (**Q2**)

[RISI–23] Piroska Haller, **Lőrinc Márton**, Prediction and Congestion Control Algorithm for Networked Motion Tracking, *Control Engineering Practice*, Elsevier, Vol. 17, No. 11, pp. 1265-1272, November 2009. **(Q2)**

[RISI–24] **Lőrinc Márton**, Béla Lantos, Control of mechanical systems with Stribeck friction and backlash, *Systems&Control Letters*, Elsevier, Vol. 58, No. 2, pp. 141-147, February 2009. **(Q1)**

[RISI–25] **Lőrinc Márton**, A. Scottedward Hodel, Béla Lantos, and John Y. Hung, Underactuated Robot Control: Comparing LQR, Subspace Stabilization, and Combined Error Metric Approaches, *IEEE Transactions on Industrial Electronics*, Vol. 55, No. 10, pp. 3724-3730, October 2008. **(Q1)**

[RISI–26] **Lőrinc Márton**, On analysis of limit cycles in positioning systems near Striebeck velocities, *Mechatronics*, Elsevier, Vol. 18, No. 1, pp. 46-52, February 2008. **(Q2)**

[RISI–27] **Lőrinc Márton**, Béla Lantos, Modeling, Identification and Compensation of Stick-Slip Friction, *IEEE Transactions on Industrial Electronics*, Vol. 54, No. 1, pp. 511-521, February 2007. **(Q1)**

Reviste BDI

[RBDI-1] **Lőrinc Márton**, Béla Lantos, Sliding Mode Robot Control with Friction and Payload Estimation, *Journal of Advanced Computational Intelligence*, Japan, Vol. 8, No. 5, pp. 553-561, 2004 (**DBLP Computer Science**)

[RBDI-2] **Lőrinc Márton**, Béla Lantos, Switching Robust Adaptive Control Based on RBF Neural Networks, *Periodica Polytechnica -Electrical Engineering*, Hungary, Vol. 46, No. 3-4, pp. 195-208, 2002. **(Scopus)**

[RBDI-3] **Lőrinc Márton,** Béla Lantos, Identification and Model-based Compensation of Striebeck Friction, *Acta Polytechnica Hungarica*, Hungary, Vol. 3. No. 3, pp. 45-58, 2006. **(Scopus)**

Alte Reviste

[R1] Áron Fehér, **Lőrinc Márton**. Comparison of the approximation methods for time-delay systems: application to multi-agent systems. *Hungarian Journal of Industry and Chemistry, 47*(1), pp. 71-77, 2019. (**EBSCO Publishing**)

[R2] **Lőrinc Márton**, Adaptive Friction Compensation In The Presence Of Backlash, *Journal of Control Engineering and Applied Informatics*, Vol. 11, No. 1, pp. 3-9, February 2009.

[R3] **Lőrinc Márton,** Tracking Control Algorithm for Industrial Robots with Unknown Friction and Payload, *Journal of Control Engineering and Applied Informatics*, Romania, Vol. 6, No 2, pp. 41-46, 2004. (Invited Paper)

[R4] Csaba Nagy, Zalán Biró-Ambrus, **Lőrinc Márton**, Ultrasound-Based Indoor Robot Localization Using Ambient Temperature Compensation, *Acta Universitatis Sapientiae - Electrical and Mechanical Engineering*, Vol 8, No. 1, pp. 19-28, De Gruyter Open, December 2016 (**EBSCO Publishing**)

[R5] **Lőrinc Márton**, Zoltán Szantó, Piroska Haller, Tamás Szabo, Hunor Sándor, Tamás Vajda, Bilateral teleoperation of wheeled mobile robots working in common workspace, *IAES International Journal of Robotics and Automation*, Vol. 3, No. 1, March 2014 (**Engineering Village, EBSCO Publishing**)

[R6] **Lőrinc Márton**, Katalin György, Two stage Kalman filtering for indoor localization of omnidirectional robots, Vol. 5, *Acta Universitatis Sapientiae - Series Electrical and Mechanical Engineering*, Vol. 5, p. 17, ISSN: 2066-8910, 2013. (**EBSCO Publishing**)

Conferințe

[CISI-38] **L. Márton**, Á. Fehér and A. Csillag, "Observer Design for Allen-Cahn Reaction-Diffusion Systems," *12th International Conference on Control, Decision and Information Technologies (CoDIT)*, Bari, Italy, 2026, pp. 520-525.

[CISI-37] H. Simon, Á. Fehér, **L. Márton**, Comparative Analysis of Attitude Estimation Algorithms on Embedded Systems, IEEE 19th International Symposium on Applied Computational Intelligence, Timisoara, Romania, 2025

[CISI-36] A. Csillag, L. Dávid, **L. Márton**, E Györfi, Z Köllő, Intelligent kinematic control of a quadrupedal mobile robot, IEEE 22nd Jubilee International Symposium on Intelligent Systems, Pula, Croatia, 2024

[CISI-35] **L. Márton**, W. Kurniawan, Fault isolation in loops of linear dynamic networks, 10th International Conference on Control, Decision and Information, Valetta, Malta, 2024

[CISI-34] Á. Fehér and **L. Márton**, "Approximation Based H∞ Control of Linear Systems with State Delays," 2023 23rd International Conference on Control, Automation and Systems (ICCAS), Yeosu, Korea, Republic of, 2023, pp. 115-120

[CISI-33] **L. Márton**, Control of Multi-Agent Systems with Distributed Delay, Proc. of IFAC World Congress, Yokohama, Japan IFAC-PapersOnLine, Vol. 56, No. 2, pp 8542-8547, 2023.

[CISI-1] Deák, Adrienn, Szánto, Zoltán, Fehér, Áron, **Márton, L**, Smartphone–controlled industrial robots: Design and user performance evaluation, IEEE Joint 22nd International Symposium on Computational Intelligence and Informatics and 8th International Conference on Recent Achievements in Mechatronics, Automation, Computer Science and Robotics (CINTI-MACRo 2022), pp. 83-88, 2022.

[CISI-2] Kurniawan, W, Hangos, K M, **Marton, L**, Parameter fault estimation in distributed heating/cooling systems, ACM Proceedings of 7th International Conference on Sustainable Information Engineering and Technology (SIET), pp. 111-118, 2022.

[CISI-3] Wijaya Kurniawan, Katalin M. Hangos, **L. Márton**, Parameter fault diagnosis in heat exchange networks with distributed time delay, 4th IFAC Workshop on Thermodynamics Foundations of Mathematical Systems Theory, Montreal, Canada, pp. 39-44, 2022.

[CISI-4] **Marton, L**, Control-oriented Modelling of Spatial Interaction-driven Migration, IEEE International Conference on Systems, Man, and Cybernetics (SMC) Melbourne, Ausztralia, pp. 970-975, 2021

[CISI-5] Á. Fehér and **L. Márton**, Approximation of discrete-time systems with delay: application to multi-agent systems, IEEE 21st International Symposium on Computational Intelligence and Informatics (CINTI), pp. 161-166, 2021

[CISI-6] Feher, Aron; **Marton, L**, Approximation and observer design for a class of continuous time-delay systems, Internatrional Conference in System Theory, Control and Computing, pp. 206-211, 2021.

[CISI-7] **Márton, L**; Hangos, K, Szederkényi, G, Disturbance Attenuation via Nonlinear Feedback for Chemical Reaction Networks, IFAC World Congress, Berlin, Germany, pp. 11497-11502, 2020.

[CISI-8] L. Nagy, **L. Marton**, Cyberattack detection and compensation for distant-controlled mobile robots, IEEE 20th International Symposium on Computational Intelligence and Informatics (CINTI), pp. 39-44, Budapest, Hungary, 2020.

[CISI-9] Á. Fehér, L. Nagy and **L. Márton**, "Testbed for Mobile Robot Platoon Control System Evaluation," IEEE 19th International Symposium on Computational Intelligence and Informatics and 7th IEEE International Conference on Recent Achievements in Mechatronics, Automation, Computer Sciences and Robotics (CINTI-MACRo), Szeged, Hungary, 2019, pp. 137-142

[CISI-10] Á. Fehér, **L. Márton**, Transient Behaviour Analysis and Design for Platoons with Communication Delay, 14th IFAC Workshop on Time Delay Systems (TDS), Sinaia, Romania, IFAC-PapersOnLine, Vol. 52, Issue 18, 2019, pp. 13-18.

[CISI-11] **L. Márton**, G. Szederkényi, K. M. Hangos, Observer-based Diagnosis in Chemical Reaction Networks 2019 18th European Control Conference (ECC), Napoli, Italy, June 25-28, 2019, pp. 3120-3125.

[CISI-12] Á. Fehér, **L. Márton**, Approximation-based Transient Behavior Analysis of Multi-Agent Systems with Delay, 14th IFAC Workshop on Time Delay Systems, Budapest, Hungary, Volume 51, Issue 14, 2018, pp. 159-164.

[CISI-13] **L. Márton**, Kai Schenk, Jan Lunze, Fault Estimation and Networked Reconfiguration in Large-Scale Control Systems, IFAC World Congress, Toulouse, France, 2017, pp. 10342-10349.

[CISI-14] **L. Márton,** T. Vajda, Flow control in wireless networked control systems: A dead-beat disturbance observer approach, IEEE 26th International Symposium on Industrial Electronics (ISIE), Edinburgh, UK, pp. 1201-1205, 2017.

[CISI-15] **L. Marton**, Cs. Nagy, Z. Biro, Robust Trilateration Based Indoor Localization Method for Omnidirectional Mobile Robots, European Control Conerence, 2016, Aalborg, Dania.

[CISI-16] **Lőrinc Márton**, Piroska Haller, Tamas Szabo, Hunor Sandor, Tamas Vajda, and Zoltan Szanto, Network Controller for Teleoperated Mobile Robotic Agents, *Springer Lecture Notes in Advances in Intelligent Systems and Computing*, Vol. 301, 2015, pp. 1437-1450, ISBN 978-3-319-08334-6.

[CISI-17] Z. Szántó, **L. Márton**, G. Sebestyén and F. István, "Target following approach for self-organized swarms based on color information," *2015 16th IEEE International Symposium on Computational Intelligence and Informatics*, Budapest, 2015, pp. 317-321.

[CISI-18] **L. Márton**, Csaba Nagy, Zalán Biró-Ambrus and Katalin György, Calibration and Measurement Processing for Ultrasonic Indoor Mobile Robot Localization Systems, Proc. of IEEE International Conference on Industrial Technology, pp. 131-136, 2015.

[CISI-19] Z. Szántó, **L. Márton**, Gy. Sebestyén, and T. I. Erdei, Investigation of robotic swarms with partial team-goal knowledge, IEEE 19th International Conference on Intelligent Engineering Systems, 2015.

[CISI-20] Cs. Nagy, Z. Biro, **L. Marton**, pp. 155-162, Development of an Ultrasound Based Tracking System for Indoor Robot Localization, 5th International Conference on Recent Achievements in Mechatronics, Automation, Computer Sciences and Robotics, pp. 155-162.

[CISI-21] Zoltán Szántó, **L. Márton**, Sebestyén György, Supervised Robot Groups with Reconfigurable Formation: Theory and Simulations, *Springer Lecture Notes in Computer Science*, Volume 8575, 2014, pp. 280-289. ISBN 978-3-319-08863-1.

[CISI-22] Szanto, Z.; **Marton, L**.; Gyorgy, S., Teleoperated mobile robot groups with reconfigurable formation, IEEE 2014 International Conference on Autonomous Robot Systems and Competitions, pp.235-240, 2014.

[CISI-23] **L. Marton**, Zoltan Szanto, Tamas Vajda, Piroska Haller, Hunor Sandor, Tamas Szabo and Levente Tamas, Communication Delay and Jitter Influence on Bilateral Teleoperation, IEEE 22nd Mediterranean Conference on Control and Automation, 2014, pp. 1171 – 1177.

[CISI-24] **L. Marton**, Time Domain Passivity Based Teleoperation Applying Bounded Output Controllers, IEEE 14'th International Symposium on Computational Intelligence and Informatics, Budapest, Hungary, 2013.

[CISI-25] H. Sandor, T. Szabo, T. Vajda, P. Haller, Z. Szanto, **L. Marton**, Video Supported Bilateral Teleoperation System: Design and Implementation, 14'th IEEE International Symposium on Computational Intelligence and Informatics, Budapest, Hungary, 2013.

[CISI-26] **L. Marton**, J. Artigas, P. Haller and T. Vajda, Passive Bilateral Teleoperation with Bounded Control Signals, IEEE 11th International Conference on Industrial Informatics, Bochum, Germany, 2013.

[CISI-27] **L. Marton**, Energetic Approach for Actuator Fault Accommodation: Application to Bilateral Teleoperation, IEEE 2nd International Conference on Control and Fault-Tolerant Systems, Nice, France 2013.

[CISI-28] **L. Márton**, Béla Lantos, A novel approach to deal with temperature dependence of friction in mechanical control systems, 2010 IEEE/ASME International Conference on Advanced Intelligent Mechatronics, pp. 920-925, Montréal, Canada, July 6-9, 2010.

[CISI-29] Mihály Berekméri, Piroska Haller, **L. Márton**, Trajectory planning for soccer and hockey playing mobile robot systems, International Carpathian Control Conference, Eger, Hungary, pp. 67-70, May 26-29, 2010.

[CISI-30] **L. Márton,** B. Lantos, Friction and backlash measurement and identification method for robotic arms, Proc. of IEEE International Conference on Advanced Robotics, München, Germany 2009.

[CISI-31] **L. Márton,** P. Haller, L. Budai, Dynamic filter based prediction for efficient networked motion tracking, Proc 5th IEEE International Conference on Industrial Informatics, pp. 461-466, Vienna, Austria, 2007.

[CISI-32] T. Vajda and **L. Marton**, "General framework for human object detection and pose estimation in video sequences," *2007 5th IEEE International Conference on Industrial Informatics*, Vienna, 2007, pp. 467-472.

Conferințe BDI

[CBDI-1] **L. Márton** and L. Tamás, "Wireless Data Rate Controller Design for Networked Control Applications," 26th Mediterranean Conference on Control and Automation, Zadar, Croatia, 2018, (**IEEE Xplore**)

[CBDI-2] **L. Marton**, Z. Szanto, T. Vajda, P. Haller, Nonlinear PI Rate Control in Bottleneck Links: Application to Teleoperation Systems, 5th IFAC Workshop on Distributed Estimation and Control in Networked Systems, 2015. (**Science Direct)**

[CBDI-3] Z. Szanto, **L. Marton**, P. Haller, G. Sebestyen, Performance analysis of WLAN based mobile robot teleoperation, IEEE 9th International Conference on Intelligent Computer Communication and Processing, Cluj Napoca, Romania, 2013. (**IEEE Xplore**)

[CBDI-4] **L. Marton**, D. Ossmann, Energetic Approach for Control Surface Disconnection Fault Detection in Hydraulic Aircraft Actuators, In: Proc of. SAFEPROCESS'12, pp. 1149-1154 Mexico City, Mexico, 2012. (**Science Direct)**

[CBDI-5] **L. Marton**, Energetic Approach to Deal with Faults in Robot Actuators. In: 20th Mediterranean Conference on Control & Automation. 2012, pp. 85 – 90 (**IEEE Xplore**)

[CBDI-6] **L Márton,** On-line lubricant health monitoring in robot actuators, Proc. of Australian Control Conference, 2011 pp. 167 – 172, Melbourne, Australia. (**IEEE Xplore**)

[CBDI-7] **L. Márton,** Detection of overload generated faults in robot manipulators with friction. In: 8th International Conference on Informatics in Control, Automation and Robotics. 2011, pp. 106 – 111, Noordwejkerhout, The Netherlands. (**DBLP**)

[CBDI-8] **L Márton**, Andreas Varga: Detection of Overload Generated Faults in Electro-Hydrostatic Actuators, 9th Mediterranean Conference on Control and Automation. 2011, pp. 767-772, Corfu, Greece. (**IEEE Xplore**)

[CBDI-9] **L. Márton,** B. Lantos, Friction and backlash induced limit cycles in mechanical control systems, Proc. of European Control Conference, pp. 3875-3880, Budapest, Hungary, 2009. (**IEEE Xplore**)

[CBDI-10] **L. Márton**, Distributed Controller Architecture for Advanced Robot Control, Proc. of IEEE International Symposium on Industrial Electronics, pp. 1412-1417, Cambridge, United Kingdom, 2008. (**IEEE Xplore**)

[CBDI-11] **L. Márton**, B. Lantos, Adaptive payload and dynamic friction compensation in robotic systems, Proc. 9th IFAC Workshop "Adaptation and Learning in Control and Signal Processing", 6 pages, Saint Petersburg, Russia, 2007. **(Science Direct)**

[CBDI-12] **L. Márton,** B. Lantos, Stable Adaptive Ball and Beam Control, Proc. of the IEEE 3rd International Conference on Mechatronics, pp. 507-512, Budapest, Hungary, 2006. (**IEEE Xplore**)

[CBDI-13] **L. Márton**, B. Lantos, Friction Modeling and Robust Adaptive Compensation, Proc. of the 16th IFAC World Congress, Prague, Czech Republic, 2005. **(Science Direct)**

[CBDI-14] **L. Márton,** Friction model for Low Velocities. Proprieties and Applications, Proc. 4th International Workshop on Robot Motion and Control, Puszczykowo, Poland, pp. 333-338., 2004. (**DBLP**)

[CBDI-15] P. Haller, **L. Márton**, L. Budai, Adaptive transfer protocol for networked motion tracking, Proc. of the IEEE 3rd International Conference on Intelligent Computer Communication and Processing Conference, pp. 163-169, Cluj Napoca, Romania, 2007. **(Scopus)**

Alte Conferințe

[C1] X. Han, J. Guo, E. Shen, S. Payandeh, **L. Márton**, On Motion Planning in Dynamic Environment Using Bezier Curve, Proceedings of The Canadian Society for Mechanical Engineering Forum 2010, Victoria, British Columbia, Canada, June 7-9, 2010.

[C2] **L. Márton**, Szabolcs Fodor, Neural Network-based Friction Identification in Hydraulic Actuators, 10th International Symposium of Hungarian Researchers on Computational Intelligence and Informatics, Budapest, Hungary, pp. 481-491, November 12-19, 2009.

[C3] Szabolcs Fodor, **L. Márton**, Nonlinear friction measurement and identification in hydraulic actuators, XIX. SZAMOKT Conference, pp 203-210, Targu Mures, Romania, October 8-11, 2009.

[C4] **L. Márton,** B. Lantos, Motion Stabilization in the Presence of Friction and Backlash: a Hybrid System Approach, Proc. of. UKACC International Conference on Control, 6 pages, Manchester, United Kingdom, 2008.

[C5] **L. Márton,** N. Kutasi, Control Technologies and Real-time Control Laboratory - Part I, Proc. of 9th International Carpathian Control Conference, pp. 412-417, Sinaia, Romania, 2008.

[C6] N. Kutasi, **L. Márton,** Control Technologies and Real-time Control Laboratory - Part II, Proc. of 9th International Carpathian Control Conference, pp. 343-350, Sinaia, Romania, 2008.

[C7] P. Haller, **L. Márton**, L. Budai, Design and analysis of a networked control system for trajectory tracking, Proc. of XVII SzamOkt Conference, pp. 59-68, Oradea, Romania, 2007.

[C8] **L. Márton,** K. Serghei, On the study and implementation of Distributed Control Systems for Trajectory Tracking, Proc. of the XVI SzamOkt Conference, pp. 115-125, Sovata, Romania, 2006.

[C9] **L. Márton**, B. Lantos, Tracking Control of Mechatronic systems based on precise friction compensation, Proc. of the 3rd Romanian-Hungarian Joint Symposium on Applied Computational Intelligence, pp. 136-147, Timisoara, Romania, 2006.

[C10] International Symposium of Hungarian Researchers, pp. 425-436, Budapest, Hungary, 2005.

[C11] **L. Márton**, B. Lantos, Low velocity friction modeling with application for DC Servo Control, Proc. 2004 International Conference on Intelligent Engineering Systems, Cluj Napoca, Romania, pp. 403-408, 2004.

[C12] **L. Márton,** Model Based Robot Control with Friction and Payload Estimation, Proc. of the 2004 IEEE-TTC International Conference on Automation, Quality, Testing and Robotics, Cluj Napoca, Romania, pp. 73-79., 2004.

[C13] **L. Márton**, B. Lantos, Improved Adaptive Control Scheme with Ball and Beam Application, Proc. of the 9th IEEE International Conference on Methods and Models in Automation and Robotics, Miedzyzdroje, Poland, pp. 569-574, 2003.

[C14] **L. Márton**, B. Lantos, Friction Model for Adaptive Compensation, Proc. of the 2003 Mediterranean Control Conference, Rhodes, Greece, 2003.

[C15] **L. Márton,** Model Based Adaptive Friction Compensation – Stability Issues, Proc. of the 11th International Workshop in Alpe-Adria-Danube Region, Balatonfüred, Hungary, pp. 61-66., 2002.

[C16] **L. Márton,** Adaptive Friction Compensation Based on Dynamic Neural Networks, Proc. of the 6th IEEE international Conference on Intelligent Engineering Systems, pp. 187-191, Opatija, Croatia, 2002.

[C17] **L. Márton,** Robot modeling based on additive dynamic neural networks, Proc. of the of Microcad 2001, pp. 159 - 164, Miskolc, Hungary, 2001.

[C18] **L. Márton**, N. Kutasi, Genetic Algorithms for Process Modeling and Robot Control, Proc. of Quality Automation And Testing 2000, pp 179-185, Cluj Napoca, Romania, 2000.

[C19] **L. Márton**, N. Kutasi, Fuzzy logic based temperature control, RODOSZ II. 2000, pp 131-142, Cluj Napoca, Romania, 2000.

[C20] **L. Márton**, N. Kutasi, Applications of neural networks and genetic algorithms in control engineering, RODOSZ II. 2000, pp 143-166, Cluj Napoca, Romania, 2000.

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