

Publication List

Levente TAMÁS

2023

Books and Book Chapters

1. L. Tamas & Z. Szekely: "Feedback Signals Estimation of an Induction Drive with Application to a Small Wind Turbine Generator", chapter printed in "Renewable Energy", ISBN 978-953-7619-X-X InTech 2009
2. L. Tamas, Gh. Lazea, A. Majdik, M. Popa, I. Szoke:: Position Estimation Techniques for Mobile Robots, RoMoCo09, Poznan, Poland, chapter published in Springer Verlag volume LNCIS, ISBN: 978-1-84882-984-8, 2009 Springer, LNCS 2009
3. L. Tamas: Sensor Fusion Based Position Estimation for Mobile Robots From multi-sensor data to digital maps, ISBN-10: 9783659305023 Lap Lambert 2012
4. Elod Pall, Levente Tamas, Lucian Busoniu: "Vision-Based Quadcopter Navigation in Structured Environments", in Handling Uncertainty and Networked Structure , in Robot Control, Springer 2015, ISBN 978-3-319-26327-4, chapter. Springer, SSDC 2015
5. Robert Frohlich, Levente Tamas, Zoltan Kato: "Homography Estimation Between Omnidirectional Cameras Without Point Correspondences+B29", in Handling Uncertainty and Networked Structure , in Robot Control, Springer 2015, ISBN 978-3-319-26327-4, chapter. Springer, SSDC 2015
6. C. Amandine, Levente Tamas: "Bremen Cog: Three Recording Techniques for One Object" in Digital Techniques for Documenting and Preserving Cultural Heritage, Arc Humanities Press, 2017, ISBN-13: 9781942401346, chapter. Arc Humanities Press 2017
7. L. Tamas, I. Muntean, E. Pal: Hydraulic and Pneumatic Control Equipments, online: <http://rrg.utcluj.ro/eahp/HPCElab.pdf> ISBN 978-606-737-031-7 UT Press 2015

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2. A Pop, V Domşa, L Tamas: Rotation Invariant Graph Neural Network for 3D Point Clouds, Remote Sensing 15 (5), 1437
3. Molnar, Szilárd; Kelenyi, Benjamin; Tamas, Levente: Feature Pyramid Network Based Efficient Normal Estimation and Filtering for Time-of-Flight Depth Cameras, Sensors, 21, 18, 6257, 2021, Multidisciplinary Digital Publishing Institute
4. Blaga, Andreea; Militaru, Cristian; Mezei, Ady-Daniel; Tamas, Levente: Augmented reality integration into MES for connected worker Computer-Integrated Manufacturing 68, 102057, 2021, Pergamon
5. Frohlich, Robert; Tamas, Levente; Kato, Zoltan: Absolute pose estimation of central cameras using planar regions, IEEE Transactions on Pattern Analysis and Machine Intelligence, vol 43, part 2, pg 377 - 391, 2020, IEEE. IF(24.3)
6. Ady-Daniel Mezei; Tamás, Levente; Buşoniu, Lucian: Sorting Objects from a Conveyor Belt Using POMDPs with Multiple-Object Observations and Information-Gain Rewards, Sensors, vol 20, part 9, pg 2481, 2020, MDPI
7. Tamas, Levente; Murar, Mircea: Smart CPS: vertical integration overview and user story with a cobot, International Journal of Computer Integrated Manufacturing, vol 32, part 4, pg 504-521, 2019 Taylor & Francis
8. Frohlich, Robert; Tamas, Levente; Kato, Zoltan: Absolute pose estimation of central cameras using planar regions, IEEE transactions on pattern analysis and machine intelligence, vol 43, part 2, pg 377 - 391, 2019, IEEE
9. Blaga, Andreea; Militaru, Cristian; Mezei, Ady-Daniel; Tamas, Levente: Augmented reality integration into MES for connected worker Computer-Integrated Manufacturing 68, 102057, 2021, Pergamon
10. Molnár, Szilárd; Kelényi, Benjamin; Tamas, Levente: Feature Pyramid Network Based Efficient Normal Estimation and Filtering for Time-of-Flight Depth Cameras, Sensors, 21, 18, 6257, 2021, Multidisciplinary Digital Publishing Institute
11. Mitrea, Delia; Tamas, Levente: "Manufacturing Execution System Specific Data Analysis-Use Case With a Cobot", 2018, IEEE Access, 2169-3536, 2018, vol 6, Q1 in COMPUTER SCIENCE, INFORMATION SYSTEMS, IF (2018) 4.098
12. Tamas, Levente; Goron, Lucian Cosmin: "3D semantic interpretation for robot perception inside office environments", ENGINEERING APPLICATIONS OF

ARTIFICIAL INTELLIGENCE Volume: 32 Pages: 76-87 Published: JUN 2014
0952-1976, Q1 in ENGINEERING, MULTIDISCIPLINARY, IF (2018) 3.526

13. Tamas Levente, Mircea Murar: "Smart CPS: vertical integration overview and user story with a cobot", INTERNATIONAL JOURNAL OF COMPUTER INTEGRATED MANUFACTURING, 0951-192X , Volume: 32 Issue: 4-5 Special Issue: SI Pages: 504-521 Published: MAY 4 2019, Q2 in OPERATIONS RESEARCH & MANAGEMENT SCIENCE, IF(2018) 2.09

14. Majdik, Andras L.; Szoke, Istvan; Popa, Mircea; Tamas, Levente; Lazea, Gheorghe: "Mapping Techniques for AMPLE, an Autonomous Security Mobile Robot", CONTROL ENGINEERING AND APPLIED INFORMATICS Volume: 13 Issue: 1 Pages: 18-24 Published: MAR 2011 , Q4 in AUTOMATION & CONTROL SYSTEMS, IF(2018) 0.583

15. Tamas, L.; Popa, M.; Lazea, Gh.; Szoke, I.; Majdik, A.: Lidar and Vision Based People Detection and Tracking, CONTROL ENGINEERING AND APPLIED INFORMATICS Volume: 12 Issue: 2 Pages: 30-35 Published: JUN 2010, Q4 in AUTOMATION & CONTROL SYSTEMS, IF(2018) 0.583

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1. S Molnar, L Tamas: Representation Learning for Point Clouds with Variational Autoencoders, European Conference on Computer Vision, 727-737
2. S Molnar, LA Romulus, L Tamas: Embedded GPU based autonomous robot use cases ,2022 30th Mediterranean Conference on Control and Automation (MED), 462-467
3. ML Pop, L Tamas: MPI Planar Correction of Pulse Based ToF Cameras, AQTR, 2022
4. VM Maer, L Tamas, B Lucian: Underwater robot pose estimation using acoustic methods and intermittent position measurements at the surface, AQTR, 2022
5. A Pop, L Tamas: Next best view estimation for volumetric information gain,,IFAC-PapersOnLine 55 (15), 160-165
6. B Kelényi, S Molnár, L Tamás: 3D object recognition using time of flight camera with embedded GPU on mobile robots, VISAPP 2022
7. S Molnar, B Kelenyi, L Tamas: ToFNest: Efficient normal estimation for time-of-flight depth cameras - Proceedings of the IEEE/CVF International Conference on Computer Vision, 2021

8. Mezei, Ady-Daniel; Tamas, Levente; Busoniu, Lucian: "Sorting objects from a conveyor belt using active perception with a POMDP model", Conference: 18th European Control Conference (ECC) Location: Naples, ITALY Date: JUN 25-28, 2019 Sponsor(s): Unvi Naples Federico II; Univ Sannio Benevento 2019 18TH EUROPEAN CONTROL CONFERENCE (ECC) Pages: 2466-2471 Published: 2019
9. Marton, Lorinc ; Tamas, Levente: "Wireless Data Rate Controller Design for Networked Control Applications", Conference: 26th Mediterranean Conference on Control and Automation (MED) Location: Zadar, CROATIA Date: JUN 19-22, 2018
10. Blaga, Andreea ; Tamas, Levente: "Augmented Reality for Digital Manufacturing", Conference: 26th Mediterranean Conference on Control and Automation (MED) Location: Zadar, CROATIA Date: JUN 19-22, 2018
11. Fulop, Andrea-Orsolya ; Tamas, Levente: "Lessons Learned from Lightweight CNN Based Object Recognition for Mobile Robots", 2018 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS (AQTR) Book Series: IEEE International Conference on Automation Quality and Testing Robotics Published: 2018
12. Frohlich, Robert ; Kato, Zoltan ; Tremeau, Alain; Tamas, Levente; Shabo, Shadi; Waksman, Yon: "Region Based Fusion of 3D and 2D Visual Data for Cultural Heritage Objects", 2016 23RD INTERNATIONAL CONFERENCE ON PATTERN RECOGNITION (ICPR) Book Series: International Conference on Pattern Recognition Pages: 2404-2409 Published: 2016
13. Pall, Elod ; Tamas, Levente ; Busoniu, Lucian: "Analysis and a home assistance application of online AEMS2 planning", 2016 IEEE/RSJ INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS (IROS 2016) Pages: 5013-5019 Published: 2016
14. Mezei, Ady-Daniel ; Tamas, Levente: "Active Perception for Object Manipulation", 2016 IEEE 12TH INTERNATIONAL CONFERENCE ON INTELLIGENT COMPUTER COMMUNICATION AND PROCESSING (ICCP) Book Series: IEEE International Conference on Intelligent Computer Communication and Processing ICCP Pages: 269-274 Published: 2016
15. Militaru, Cristian ; Mezei, Ady-Daniel ; Tamas, Levente: "Object Handling in Cluttered Indoor Environment with a Mobile Manipulator", PROCEEDING OF 2016 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS (AQTR) Book Series: IEEE International Conference on Automation Quality and Testing Robotics Pages: 487-492 Published: 2016

16. Tamas, Levente ; Frohlich, Robert ; Kato, Zoltan: "Relative Pose Estimation and Fusion of Omnidirectional and Lidar Cameras", COMPUTER VISION - ECCV 2014 WORKSHOPS, PT II Book Series: Lecture Notes in Computer Science Volume: 8926 Pages: 640-651 Published: 2015
17. Kato, Zoltan ; Tamas, Levente: "Relative Pose Estimation and Fusion of 2D Spectral and 3D Lidar Images", COMPUTATIONAL COLOR IMAGING, CCIW 2015 Book Series: Lecture Notes in Computer Science Volume: 9016 Pages: 33-42 Published: 2015
18. Bulezyuk, Alexander ; Tamas, Levente: "Visual Tracking with a Small Scale Aircraft", 2015 16TH IEEE INTERNATIONAL SYMPOSIUM ON COMPUTATIONAL INTELLIGENCE AND INFORMATICS (CINTI) Book Series: International Symposium on Computational Intelligence and Informatics Pages: 349-354 Published: 2015
19. Pall, Elod ; Mathe, Koppany ; Tamas, Levente; Busoniu, Lucian: "Railway Track Following with the AR.Drone Using Vanishing Point Detection", 2014 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS Book Series: IEEE International Conference on Automation Quality and Testing Robotics Published: 2014
20. Boochs, Frank ; Bentkowska-Kafel, Anna ; Degrigny, Christian; Karaszewski, Maciej; Karmacharya, Ashish; Kato, Zoltan; Picollo, Marcello; Sitnik, Robert; Tremeau, Alain; Tsiafaki, Despoina; Tamas, Levente: "Colour and Space in Cultural Heritage: Key Questions in 3D Optical Documentation of Material Culture for Conservation, Study and Preservation", DIGITAL HERITAGE: PROGRESS IN CULTURAL HERITAGE: DOCUMENTATION, PRESERVATION, AND PROTECTION Book Series: Lecture Notes in Computer Science Volume: 8740 Pages: 11-24 Published: 2014
21. Marton, Lorinc ; Szanto, Zoltan ; Vajda, Tamas; Haller, Piroska; Sandor, Hunor; Szabo, Tamas; Tamas, Levente: "Communication Delay and Jitter Influence on Bilateral Teleoperation", 2014 22ND MEDITERRANEAN CONFERENCE ON CONTROL AND AUTOMATION (MED) Book Series: Mediterranean Conference on Control and Automation Pages: 1171-1176 Published: 2014
22. Tamas, Levente ; Jensen, Bjoern: "Robustness Analysis of 3D Feature Descriptors for Object Recognition Using a Time-of-Flight Camera", 2014 22ND MEDITERRANEAN CONFERENCE ON CONTROL AND AUTOMATION (MED) Book Series: Mediterranean Conference on Control and Automation Pages: 1020-1025 Published: 2014

23. Tamas, Levente ; Kato, Zoltan: "Targetless Calibration of a Lidar - Perspective Camera Pair", 2013 IEEE INTERNATIONAL CONFERENCE ON COMPUTER VISION WORKSHOPS (ICCVW) Pages: 668-675 Published: 2013
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25. Lucian Cosmin ; Tamas, Levente ; Lazea, Gheorghe: "Classification within Indoor Environments using 3D Perception", 2012 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS, THETA 18TH EDITION Book Series: IEEE International Conference on Automation Quality and Testing Robotics Pages: 400-405 Published: 2012
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27. Majdik, Andras L. ; Tamas, Levente ; Popa, Mircea; Szoke, Istvan; Lazea, Gheorghe: "Visual Odometer System to Build Feature Based Maps for Mobile Robot Navigation", 18TH MEDITERRANEAN CONFERENCE ON CONTROL AND AUTOMATION Book Series: Mediterranean Conference on Control and Automation Pages: 1200-1205 Published: 2010
28. Goron, L. C. ; Tamas, L. ; Reti, I.; Lazea, G: "3D Laser Scanning System and 3D Segmentation of Urban Scenes", PROCEEDINGS OF 2010 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS (AQTR 2010), VOLS. 1-3 Book Series: IEEE International Conference on Automation Quality and Testing Robotics Published: 2010
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32. Tamas, Levente ; Popa, Mircea ; Lazea, Gheorghe : "PATTERN RECOGNITION FROM LIDAR FOR DYNAMIC OBJECT DETECTION", Annals Of Daaam For 2009 Book Series: Annals of Daaam and Proceedings Volume: 20 Pages: 549-550 Published: 2009

33. Majdik, Andras ; Tamas, Levente ; Lazea, Gheorghe: "FAST POINT CLOUD REGISTRATION ALGORITHM TO BUILD 3D MAPS FOR ROBOT NAVIGATION", Annals Of Daaam For 2009 Book Series: Annals of Daaam and Proceedings Volume: 20 Pages: 933-934

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36. Tamas, Levente ; Lazea, Gheorghe ; Majdik, Andras; Popa, Mircea; Szoke, Istvan: "Position Estimation Techniques for Mobile Robots", ROBOT MOTION AND CONTROL 2009 Book Series: Lecture Notes in Control and Information Sciences Volume: 396 Pages: 319-328 Published: 2009

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1. L. Tamas, A. Majdik: “Heterogeneous Feature Based Correspondence Estimation”, 2012 IEEE International Conference on Multisensor Fusion and Integration, Hamburg, Germany

2. M. Duca, L. Tamas: “Development of an Operation Training System – a Case Study”, 14th IFAC Proceedings Volumes Volume 45, Issue 6, 23–25 May 2012, Pages 1622-1627

3. L. Tamas, C. Marcu: "Detection and Tracking Experiment Design in Various Environments", 2011 15th International Conference on Advanced Robotics (ICAR), pp 180-185
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5. A. Majdik, M. Popa, L. Tamas, I. Szoke, Gh. Lazea: "New Approach in Solving the Kidnapped Robot Problem", ISR 2010 (41st International Symposium on Robotics) and ROBOTIK 2010, Munich, Germany
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