

# Publication List

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Levente TAMÁS

2020

## *Books and Book Chapters*

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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

### *Journal Papers (ISI indexed)*

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1. 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
2. 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
3. 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
4. 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
5. 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

### *Papers published in an International Conference Volume (ISI indexed)*

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1. 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
2. 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 Sponsor(s): Mediterranean Control Assoc; KoREMA Croatian Soc Communications Comp Electron Measurement & Control; IEEE; IEEE Robot & Automat Soc; IEEE Control Syst Soc

2018 26TH MEDITERRANEAN CONFERENCE ON CONTROL AND AUTOMATION (MED)  
Book Series: Mediterranean Conference on Control and Automation Pages: 448-453  
Published: 2018

3. 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 Sponsor(s): Mediterranean Control  
Assoc; KoREMA Croatian Soc Communications Comp Electron Measurement & Control;  
IEEE; IEEE Robot & Automat Soc; IEEE Control Syst Soc 2018 26TH MEDITERRANEAN  
CONFERENCE ON CONTROL AND AUTOMATION (MED) Book Series: Mediterranean  
Conference on Control and Automation Pages: 173-178 Published: 2018

4. 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

5. 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

6. 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

7. 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

8. 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

9. 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

10. 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

11. 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

12. Pall, Elod ; Mathe, Koppány ; 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

13. Boochs, Frank ; Bentkowska-Kafel, Anna ; Degriigny, 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

14. 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

15. 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

16. 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

17. Tamas, Levente ; Lazea, Gheorghe: "3D Non-Contact Building Survey Technique", INTERDISCIPLINARY RESEARCH IN ENGINEERING: STEPS TOWARDS BREAKTHROUGH INNOVATION FOR SUSTAINABLE DEVELOPMENT Book Series: Advanced Engineering Forum Volume: 8-9 Pages: 584-592 Published: 2013
18. 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
19. Marcu, C. ; Herle, S. ; Tamas, L.; Lazea, Gh: "Video based Control of a 6 Degrees-of-Freedom Serial Manipulator", 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: 417-421 Published:
20. 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
21. 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
22. Majdik, A. L. ; Szoke, I. ; Tamas, L.; Popa, M.; Lazea, Gh: "Laser and vision based map building techniques for mobile robot navigation", 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
23. Tamas, Levente ; Lazea, Gheorghe ; Popa, Mircea; Szoke, Istvan; Majdik, Andras: "Laser Based Localization Techniques for Indoor Mobile Robots", AT-EQUAL 2009: 2009 ECSIS SYMPOSIUM ON ADVANCED TECHNOLOGIES FOR ENHANCED QUALITY OF LIFE: LAB-RS AND ARTIPED 2009 Pages: 169-170 Published: 2009

24. M Popa, G Lazea, A Majdik, L Tamas, I Szoke: "An Effective Method for People Detection in Grayscale Image Sequences", 2009 IEEE 5TH INTERNATIONAL CONFERENCE ON INTELLIGENT COMPUTER COMMUNICATION AND PROCESSING, PROCEEDINGS Book Series: IEEE International Conference on Intelligent Computer Communication and Processing ICCP Pages: 181-184 Published: 2009
25. 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
26. 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
27. Szoke, Istvan ; Lazea, Gheorghe ; Tamas, Levente; Popa, Mircea; Majdik, Andras: "Path Planning and Dynamic Objects Detection", ICAR: 2009 14TH INTERNATIONAL CONFERENCE ON ADVANCED ROBOTICS, VOLS 1 AND 2 Pages: 772-777 Published: 2009
28. Szoke, Istvan ; Lazea, Gheorghe ; Tamas, Levente; Popa, Mircea; Majdik, Andras: "PATH PLANNING WITH MARKOVIAN PROCESSES", ICINCO 2009: PROCEEDINGS OF THE 6TH INTERNATIONAL CONFERENCE ON INFORMATICS IN CONTROL, AUTOMATION AND ROBOTICS, VOL 2: ROBOTICS AND AUTOMATION Pages: 479-482 Published: 2009
29. 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
30. Tamas, L. ; Lazea, Gh. ; Robotin, R.; Marcu, C.; Herle, S.; Szekely, Z: "State estimation based on Kalman filtering techniques in navigation", 2008 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS (AQTR 2008), THETA 16TH EDITION, VOL II, PROCEEDINGS Pages: 147-152 Published: 2008
31. Herle, S. ; Raica, Paula ; Lazea, Gh.; Robotin, R.; Marcu, C.; Tamas, L: "Classification of surface electromyographic signals for control of upper limb virtual prosthesis using time-domain features", 2008 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS (AQTR 2008), THETA 16TH EDITION, VOL III, PROCEEDINGS Pages: 160-165 Published: 2008

32. Tamas, L. ; Szekely, Z.: "Modeling and simulation of an induction drive with application to a small wind turbine generator", 2008 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS (AQTR 2008), THETA 16TH EDITION, VOL III, PROCEEDINGS Pages: 429-433 Published: 2008
33. Marcu, C. ; Lazea, Gh. ; Robotin, R.; Herle, S.; Tamas, L: "Industrial robot controller using miniature computers", 2008 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS (AQTR 2008), THETA 16TH EDITION, VOL II, PROCEEDINGS Pages: 341-344 Published: 2008
34. Lazea, Gh. ; Robotin, R. ; Herle, S.; Marcu, C.; Tamas, L: "Mobile robots formation navigation with behavior based algorithms", 2008 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS (AQTR 2008), THETA 16TH EDITION, VOL II, PROCEEDINGS Pages: 388-391 Published: 2008
35. Tamas, Levente ; Lazea, Gheorghe ; Robotin, Radu; Marcu, Cosmin; Majdik, Andra: "MOBILE ROBOT POSITION ESTIMATION BASED ON MULTI SENSOR FUSION", Annals OF Daaam For 2008 & Book Series: Annals of Daaam and Proceedings Pages: 1351-1352 Published: 2008
36. Tamas, Levente ; Nascu, Ioan ; De Keyser, Robin: "The NEPSAC nonlinear predictive controller in a real life experiment", INES 2007: 11TH INTERNATIONAL CONFERENCE ON INTELLIGENT ENGINEERING SYSTEMS, PROCEEDINGS Book Series: International Conference on Intelligent Engineering Systems Pages: 229-232 Published: 2007

*Papers published at International Conferences (IEEEExplore, Ifacpapers, etc)*

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

4. L. Tamas, Gh. Lazea: "Pattern recognition and tracking dynamic objects with LIDAR", ISR 2010 (41st International Symposium on Robotics) and ROBOTIK 2010, Munich, Germany
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
6. L. Busoniu, L. Tamas: "Optimistic Planning for the Near-Optimal Control of General Nonlinear Systems with Continuous Transition Distributions", IFAC Proceedings Volumes Volume 47, Issue 3, 2014, Pages 1910-1915