

LISTĂ DE LUCRĂRI

1. LISTA LUCRĂRILOR CONSIDERATE DE CANDIDAT A FI CELE MAI RELEVANTE PENTRU REALIZĂRILE PROFESIONALE PROPRII

1. **S.M. Grigorescu**, B. Trasnea, T. Cocias and G. Macesanu, "A Survey of Deep Learning Techniques for Autonomous Driving", *Journal of Field Robotics*, 2019 (**impact factor 4,345**).
2. **S.M. Grigorescu**, B. Trasnea, L. Marina, A. Vasilcoi and T. Cocias, "NeuroTrajectory: A Neuroevolutionary Approach to Local State Trajectory Learning for Autonomous Vehicles", *IEEE Robotics and Automation Letters*, vol. 4, no. 4, pp. 3441-3448, Oct. 2019 (**impact factor 3,6**).
3. **S.M. Grigorescu**, "Generative One-Shot Learning (GOL): A Semi-Parametric Approach to One-Shot Learning in Autonomous Vision", *Int. Conf. on Robotics and Automation ICRA 2018*, Brisbane, Australia, May 21-25, 2018.
4. **S.M. Grigorescu**, G. Macesanu, T.T. Cocias, D. Puiu and F. Moldoveanu, "Robust Camera Pose and Scene Structure Analysis for Service Robotics", *Robotics and Autonomous Systems*, Elsevier, Vol. 59, No. 11, DOI: 10.1016/j.robot.2011.07.005, ISSN: 0921-8890, 2011 (**impact factor 2,928**).
5. **S.M. Grigorescu**, T. L  th, C. Fragkopoulos, M. Cyriacks and Axel Gr  ser, "A BCI Controlled Robotic Assistant for Quadriplegic People in Domestic and Professional Life", *Robotica*, Cambridge University Press, vol. 30, no. 3, DOI:10.1017/S0263574711000737, 2012 (**impact factor 1,184**).
6. T. Cocias, A. Razvant, **S.M. Grigorescu**, "GFPNet: A Deep Network for Learning Shape Completion in Generic Fitted Primitives", *IEEE Robotics and Automation Letters*, vol. 5, no. 3, pp. 4493-4500, Jul. 2020 (**impact factor 3,6**).
7. G. M  cesanu, V. Comnac, F. Moldoveanu and **S.M. Grigorescu**, "A Time-Delay Control Approach for a Stereo Vision Based Human-Machine Interaction System", *Journal of Intelligent & Robotic Systems*, Springer Netherlands, DOI: 10.1007/s10846-013-9994-4, ISSN 0921-0296, 2013 (**impact factor 2,020**).
8. T. Cocias, F. Moldoveanu and **S.M. Grigorescu**, "Generic Fitted Shapes (GFS): Volumetric Object Segmentation in Service Robotics", *Robotics and Autonomous Systems*, Elsevier, Vol. 61, No. 9, DOI: 10.1016/j.robot.2013.04.020, ISSN: 0921-8890, 2013 (**impact factor 2,928**).
9. **S.M. Grigorescu** and C. Pozna, "Towards a Stable Robotic Object Manipulation through 2D-3D Features Tracking", *Advanced Robotic Systems*, InTech, ISSN: 1729-8806, 2013 (**impact factor 1,223**).
10. **S.M. Grigorescu**, D. Pangercic and M. Beetz "2D-3D Collaborative Tracking (23CT): Towards Stable Robotic Manipulation", *Proc. of the 2012 IEEE-RSJ International Conference on Intelligent Robots and Systems IROS*, Workshop on Active Semantic Perception, Vilamoura, Algarve, Portugal, October 7-12, 2012.

2. TEZA DE DOCTORAT

1. "Robust Machine Vision for Service Robotics (*Procesare de imagini robustă pentru roboți de serviciu*)"; specializarea: Automatizarea proceselor; anul susținerii 2010; comisia de doctorat: prof. dr. ing. A. GRÄSER (președinte, conducător științific) – Universitatea Bremen, Germania, prof. dr. ing. W. ANHEIER (referent) – Universitatea Bremen, Germania, prof. dr. ing. U. FRESE (referent) – Universitatea Bremen, Germania, prof. dr. ing. K.L. KRIEGER (referent) – Universitatea Bremen, Germania.

3. BREVETE DE INVENȚIE

1. **S.M. Grigorescu**, G. Măceșanu, T.T. Cociaș, B. Trasnea, C. Ginerică "Generating training images for machine learning-based object recognition systems," European Patent Application, Patent no. EP 3 343 432 A1, Date of publication: 04.07.2018.

4. CĂRȚI ȘI CAPITOLE ÎN CĂRȚI

1. **S.M. Grigorescu**, *Robust Machine Vision for Service Robotics*, Editura Shaker, Aachen, Germania, 2010, 150 pag., ISBN 978-3-8322-9146-4, ISSN 1861-5457.
2. **S.M. Grigorescu** and Gräser, A. *AMaRob: Autonomous Manipulator control for rehabilitation robots* (in German), 2010.
3. **S.M. Grigorescu**, G. Măceșanu și T.T. Cociaș, *Sisteme de vedere artificială*. Editura Universității Transilvania, 2018.
4. T.T. Cociaș, **S.M. Grigorescu**, *Estimarea volumetrică 3D utilizată în structurile robotice pentru prehensarea obiectelor*. Editura Universității Transilvania, 2018.
5. **S.M. Grigorescu** and G. Măceșanu, "Human-Robot Interaction through Robust Gaze Following", Book series: *Information Technology and Computational Physics. Advances in Intelligent Systems and Computing*, Springer, vol. 462, ISBN 978-3-319-44259-4, pp 165-178, 2017.
6. **S.M. Grigorescu** și Cosmin Ginerică, *Recunoașterea Formelor, Îndrumar de laborator*. Set de lucrări practice privind procesarea statistică a datelor pentru disciplina „Machine Learning”. Editura Universității Transilvania, ISBN 978-606-19-0894-3, 2017.
7. **S.M. Grigorescu**, G. Măceșanu și T.T. Cociaș, *Sisteme de vedere artificială. Îndrumar de laborator*. Set de lucrări practice privind procesarea de imagini și vederea artificială 3D pentru disciplinele „Sisteme de vedere artificială” și „Sisteme de reglare în vederea artificială”. Editura Universității Transilvania, 2013.
8. G. Măceșanu, **S.M. Grigorescu** și F. Moldoveanu, *Controlul sistemelor de vedere activă în interacțiunea om-mașină*. Editura Universității Transilvania, 2013.
9. **S.M. Grigorescu**, G. Măceșanu și T.T. Cociaș, *Sisteme de vedere artificială utilizând OpenCV 3. Îndrumar de laborator*. Set de lucrări practice privind procesarea de imagini și vederea artificială 3D pentru disciplinele „Sisteme de vedere artificială”. Editura Universității Transilvania, 2016.
10. T.T. Cociaș, **S.M. Grigorescu** and F. Moldoveanu, "Single View 3D Structure Estimation using Generic Fitted Primitives (GFP) for Service Robotics", *Computer Vision, Imaging and Computer Graphics. Theory and Application, Communications in Computer and Information Science*, Springer, Berlin-Heidelberg, vol. 359, ISBN: 978-3-642-38240-6, DOI: 10.1007/978-3-642-38241-3_25, pp. 369-382, 2013.
11. T.T. Cociaș, **S.M. Grigorescu** and F. Moldoveanu, "Indoor Pose Estimation Using 3D Scene Landmarks for Service Robotics", *Issues and Challenges of Intelligent Systems and Computational Intelligence*, Springer, Berlin-Heidelberg, Editors: László T. Kóczy, Claudiu R. Pozna, Janusz Kacprzyk, vol. 530, ISBN: 978-3-319-03205-4, DOI: 10.1007/978-3-319-03206-1_15, pp. 199-211, 2014.

5. ARTICOLE PUBLICATE ÎN REVISTE DIN FLUXUL ȘTIINȚIFIC INTERNAȚIONAL PRINCIPAL

1. T. Cocias, A. Razvant, **S.M. Grigorescu**, "GFPNet: A Deep Network for Learning Shape Completion in Generic Fitted Primitives", *IEEE Robotics and Automation Letters*, vol. 5, no. 3, pp. 4493-4500, Jul. 2020 (**ISI Journal**).
2. M. Schleicher, **S.M. Grigorescu**, "How Neural Networks Change Automotive Software Development", *ATZ Elektron*, Springer, no. 15, pp. 18-24, DOI: <https://doi.org/10.1007/s38314-019-0153-y>, 2020.
3. **S.M. Grigorescu**, B. Trasnea, T. Cocias and G. Macesanu, "A Survey of Deep Learning Techniques for Autonomous Driving", *Journal of Field Robotics*, 2019 (**ISI Journal**).
4. **S.M. Grigorescu**, B. Trasnea, L. Marina, A. Vasilcoi and T. Cocias, "NeuroTrajectory: A Neuroevolutionary Approach to Local State Trajectory Learning for Autonomous Vehicles", *IEEE Robotics and Automation Letters*, vol. 4, no. 4, pp. 3441-3448, Oct. 2019.
5. L. Marina, F. Moldoveanu and **S.M. Grigorescu** "Real-time Driving Context Understanding using Deep Grid Net: A Granular Approach", *Journal of Robotic Computing*, 2019.
6. **S.M. Grigorescu**, M. Glaab and A. Roßbach, "Chances and challenges for machine learning in highly automated driving, part 2: Theoretical background", *Embedded Computing Design*, <http://www.embedded-computing.com/articles/chances-and-challenges-for-machine-learning-in-highly-automated-driving-part-2-theoretical-background>, 2018.
7. **S.M. Grigorescu**, M. Glaab and A. Roßbach, "From logistics regression to self-driving cars: Chances and challenges for machine learning in highly automated driving", *Embedded Computing Design*, <http://www.embedded-computing.com/articles/from-logistics-regression-to-self-driving-cars-chances-and-challenges-for-machine-learning-in-highly-automated-driving>, 2018.
8. **S.M. Grigorescu**, M. Glaab and J. Schlosser, "KI für Selbstfahrende Autos", *EE Faszination Elektronik*, <http://www.industr.com/2303747/121541>, 2017.
9. **S.M. Grigorescu**, M. Glaab and A. Roßbach, "From logistic regression to self-driving cars: Chances and challenges of using machine learning for highly automated driving", *Elektrobit Automotive TechPaper*, <https://www.elektrobit.com/newsroom/read-new-techpaper-chances-challenges-using-machine-learning-highly-automated-driving/>, 2017.
10. **S.M. Grigorescu** and G. Măceșanu, "Human-Robot Interaction through Robust Gaze Following", Book series: *Information Technology and Computational Physics. Advances in Intelligent Systems and Computing*, Springer, vol. 462, ISBN 978-3-319-44259-4, pp 165-178, 2017.
11. **S.M. Grigorescu** and F. Moldoveanu, "A Feedback Control Gaze Following Approach for Human-Robot Interaction", *Memoirs of the Scientific Sections of the Romanian Academy*, Tome XXXIX, ISBN 978-973-27-1551-2, 2016.
12. G. Măceșanu, V. Comnac, F. Moldoveanu and **S.M. Grigorescu**, "A Time-Delay Control Approach for a Stereo Vision Based Human-Machine Interaction System", *Journal of Intelligent & Robotic Systems*, Springer Netherlands, DOI: 10.1007/s10846-013-9994-4, ISSN 0921-0296, 2013 (**ISI Journal**).
13. T. Cociaș, F. Moldoveanu and **S.M. Grigorescu**, "Generic Fitted Shapes (GFS): Volumetric Object Segmentation in Service Robotics", *Robotics and Autonomous Systems*, Elsevier, Vol. 61, No. 9, DOI: 10.1016/j.robot.2013.04.020, ISSN: 0921-8890, 2013 (**ISI Journal**).
14. **S.M. Grigorescu** and C. Pozna, "Towards a Stable Robotic Object Manipulation through 2D-3D Features Tracking", *Advanced Robotic Systems*, InTech, ISSN: 1729-8806, 2013 (**ISI Journal**).

15. G. Măceșanu, **S.M. Grigorescu** and F. Moldoveanu, "A PTZ Stereo Camera Vision System for Robotic Perception", *International Journal of Mechanics and Control*, Vol. 13, No. 01, ISSN 1590-8844, 2012.
16. Danijela Ristić-Durrant, **Sorin M. Grigorescu**, Axel Gräser, Žarko Čojbašić and Vlastimir Nikolić, „Robust Stereo-Vision Based 3D Object Reconstruction for the Assistive Robot FRIEND”, *Advances in Electrical and Computer Engineering*, Volume 11, Issue 4, pp. 15 – 22, 2011 (**ISI Journal**).
17. **S.M. Grigorescu**, G. Măcesanu, T.T. Cocias, D. Puiu and F. Moldoveanu, "Robust Camera Pose and Scene Structure Analysis for Service Robotics", *Robotics and Autonomous Systems*, Elsevier, DOI: 10.1016/j.robot.2011.07.005, ISSN: 0921-8890, 2011 (**ISI Journal**).
18. G. Măceșanu, **S.M. Grigorescu**, T. Cociaș and F. Moldoveanu, "An Object Detection and 3D Reconstruction Approach for Real-time Scene Understanding", *Bulletin of the Transilvania University of Brașov, Series I: Engineering Sciences, Electrical Engineering, Electronics and Automation*, ISSN 2065-2119, 2011.
19. **S.M. Grigorescu**, T. Lüth, C. Fragkopoulou, M. Cyriacks and Axel Gräser, "A BCI Controlled Robotic Assistant for Quadriplegic People in Domestic and Professional Life", *Robotica*, Cambridge University Press, vol. 30, no. 3, DOI:10.1017/S0263574711000737, 2012 (**ISI Journal**).
20. Z. Cobasic, V. Nikolic, I. Ciric and **S.M. Grigorescu**, "Advanced Evolutionary Optimization for Intelligent Modeling and Control of FBC Process", *FACTA Universitatis, Series in Mechanical Engineering*, Vol. 8, No. 1, UDC 66.096.5, 519.673, 681.51, 2010.
21. S. Natarajan, **S.M. Grigorescu** and D. Mronga, "Robust Detection and 3D Reconstruction of Boundary Segmented Objects in a Robotic Library Scenario", *Methods and Applications in Automation*, Shaker Verlag, Series 1, No. 3, ISBN 978-3-8322-7666-9, ISSN 1861-5457, 2010.
22. **S.M. Grigorescu** and D. Ristic-Durrant, "Robust Extraction of Object Features in the System FRIEND II", *Methods and Applications in Automation*, Shaker Verlag, Series 1, No. 2, pp. 97÷107, ISBN 978-3-8322-7666-9, ISSN 1861-5457, 2008.
23. **S.M. Grigorescu** and G. Măceșanu, "Dynamic Road Structure Estimation", *Bulletin of the Transilvania University of Brașov, Series I: Engineering Sciences, Electrical Engineering, Electronics and Automation*, vol. 8 (57), no. 2, ISSN 2065-2127, 2015.
24. G. Măceșanu and **S.M. Grigorescu**, "Feedback Control Analysis of a Stereo Active Vision System", *Bulletin of the Transilvania University of Brașov, Series I: Engineering Sciences, Electrical Engineering, Electronics and Automation*, vol. 8 (57), no. 2, ISSN 2065-2127, 2015.

6. PUBLICAȚII ÎN EXTENSO, APĂRUTE ÎN LUCRĂRI ALE PRINCIPALELOR CONFERINȚE INTERNAȚIONALE DE SPECIALITATE.

1. C. Sandor, S. Pavel, W. Erik, A. Blaga, P. Boda, A.O. Fulop, A. Ursache, A. Zold, A. Kopacz, B. Lazar, K. Szabo, Z. Tasnadi, B. Trinfă, L. Csato, D.M. Tegzes, M.L. Pop, R.A. Tarziu, M.V. Zaha, **S.M. Grigorescu**, L. Busoniu, P. Raica, L. Tamas, "The ClujUAV student competition: A corridor navigation challenge with autonomous drones", *21st Int. Federation of Automatic Control World Congress IFAC*, Berlin, Germany, 2020.
2. D. Calaver, L. Floroian and **S.M. Grigorescu** "Assistive Rehabilitation using a 7-DoF Robotic Arm with Self-Collision and Obstacle Avoidance System", *IEEE Int. Conf. on e-Health and Bioengineering EHB 2019*, Iasi, Romania, 21-23 November 2019.
3. B. Trasnea, C. Pozna and **S.M. Grigorescu**, "AIBA: An AI Model for Behavior Arbitration in Autonomous Driving", *13th Multi-Disciplinary Int. Conf. on Artificial*

Intelligence, Kuala Lumpur, Malaysia, November 17-19 2019 (**Indexed by ISI Thomson Reuters**).

4. T. Cocias and **S.M. Grigorescu**, "GFPNet. Neural network based volumetric object reconstruction using generic fitted primitives," *3rd Conference on Recent Advances in Artificial Intelligence RAAI 2019*, Bucharest, Romania, June 28-30, 2019.
5. L. Marina, B. Trasnea, C. Tiberiu, A. Vasilcoi, F. Moldoveanu and **S.M. Grigorescu**, "Deep Grid Net (DGN): A Deep Learning System for Real-Time Driving Context Understanding", *Int. Conf. on Robotic Computing IRC 2019*, Naples, Italy, February 25-27, 2019 (**Indexed by ISI Thomson Reuters**).
6. B. Trasnea, L. Marina, A. Vasilcoi, C. Pozna and **S.M. Grigorescu**, "GridSim: A Vehicle Kinematics Engine for Deep Neuroevolutionary Control in Autonomous Driving", *Int. Conf. on Robotic Computing IRC 2019*, Naples, Italy, February 25-27, 2019 (**Indexed by ISI Thomson Reuters**).
7. L.A. Marina, B. Trasnea and **S.M. Grigorescu**, A Multi-Platform Framework for Artificial Intelligence Engines in Automotive Systems, 22nd Int. Conf. on System Theory, Control and Computing (ICSTCC), 2018 (**Indexed by ISI Thomson Reuters**).
8. **S.M. Grigorescu**, "Generative One-Shot Learning (GOL): A Semi-Parametric Approach to One-Shot Learning in Autonomous Vision", *Int. Conf. on Robotics and Automation ICRA 2018*, Brisbane, Australia, May 21-25, 2018 (**Indexed by ISI Thomson Reuters**).
9. L. Marina, F. Moldoveanu and **S.M. Grigorescu**, "Environment perception in racing simulators using deep neural networks," *Int. Conf. on Optimization of Electrical and Electronic Equipment*, Brasov, Romania, 25-27 May 2017 (**Indexed by ISI Thomson Reuters**).
10. B. Trăsnea, G. Măceşanu, **S.M. Grigorescu** and T. Cociaş, "Smartphone Based Mass Traffic Sign Recognition for Real-time Navigation Maps Enhancement," *Int. Conf. on Optimization of Electrical and Electronic Equipment*, Brasov, Romania, 25-27 May 2017 (**Indexed by ISI Thomson Reuters**).
11. **S.M. Grigorescu** and G. Măceşanu, "Human-Robot Interaction through Robust Gaze Following," *Congress on Information Technology, Computational and Experimental Physics CITCEP 2015*, Cracow, Poland, December 18-20, 2015.
12. T. Cociaş, F. Moldoveanu and **S.M. Grigorescu**, "Generic Fitted Primitives (GFP): Towards Full Object Volumetric Reconstruction for Service Robotics", *Proc. of the 21st Int. Conf. in Central Europe on Computer Graphics, Visualization and Computer Vision 2013*, ISSN 1213-6972, Plzen, Czech Republic, June 24-27, 2013 (**Indexed by ISI Thomson Reuters**).
13. **S.M. Grigorescu**, D. Pangercic and M. Beetz "2D-3D Collaborative Tracking (23CT): Towards Stable Robotic Manipulation", *Proc. of the 2012 IEEE-RSJ International Conference on Intelligent Robots and Systems IROS*, Workshop on Active Semantic Perception, Vilamoura, Algarve, Portugal, October 7-12, 2012.
14. G. Macesanu, **S.M. Grigorescu** and F. Moldoveanu, "On Facial Features Tracking using an Active Stereo Camera Control Approach", *Fifth Győr Symposium & First Hungarian-Polish Joint Conference On Computational Intelligence*, Győr, Ungaria, 2012.
15. T.T. Cociaş, **S.M. Grigorescu** and F. Moldoveanu, "3DOR based Global Pose Estimation for Service Robotics", *Fifth Győr Symposium & First Hungarian-Polish Joint Conference On Computational Intelligence*, Győr, Ungaria, 2012.
16. T.T. Cociaş, **S.M. Grigorescu** and F. Moldoveanu, "Multiple-Superquadrics based Object Surface Estimation for Grasping in Service Robotics" *13th International Conference on Optimization of Electrical and Electronic Equipment*, Brasov, Romania, 24-26 May 2012, pp. 1471-1477 (**Indexed by ISI Thomson Reuters**).
17. G. Macesanu, **S.M. Grigorescu**, J.F. Ferreira, J. Dias and F. Moldoveanu, "Real Time Facial Features Tracking using an Active Vision System" *13th International Conference*

- on *Optimization of Electrical and Electronic Equipment*, Brasov, Romania, 24-26 May 2012, pp. 1493-1498 (**Indexed by ISI Thomson Reuters**).
18. **S.M. Grigorescu**, T.T. Cocias, G. Măceșanu and F. Moldoveanu, "Stereo Vision-Based 3D Camera Pose and Object Structure Estimation: An Application to Service Robotics", *7th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications*, 24-26 February, Rome, Italy, 2012 (**Indexed by ISI Thomson Reuters**).
 19. T.T. Cocias, **S.M. Grigorescu** and F. Moldoveanu, "Object Volumetric Estimation Based on Generic Fitted Primitives for Service Robotics", *7th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications*, 24-26 February, Rome, Italy, 2012 (**Indexed by ISI Thomson Reuters**).
 20. **S.M. Grigorescu**, "On Robust 3D Scene Perception and Camera Egomotion Estimation", *Methods and Applications in Automation*, Shaker Verlag, Series 1, No. 3, pp. 1+8, ISBN 978-3-8322-7666-9, ISSN 1861-5457, 2012.
 21. **S.M. Grigorescu**, G. Măceșanu, T.T. Cocias and F. Moldoveanu, "On the Real-time Modelling of a Robotic Scene Perception and Estimation System", *15th Int. Conf. On System Theory, Control and Computing ICSTCC 2011*, Sinaia, Romania, October 14-16, 2011 (**Indexed by ISI Thomson Reuters**).
 22. G. Măceșanu, **S.M. Grigorescu** and V. Comnac, "Time-delay Analysis of a Robotic Stereo Active Vision System", *15th Int. Conf. On System Theory, Control and Computing ICSTCC 2011*, Sinaia, Romania, October 14-16, 2011 (**Indexed by ISI Thomson Reuters**).
 23. T.T. Cocias, **S.M. Grigorescu** and F. Moldoveanu, "On Performance Evaluation of 3D Scene Reconstruction Systems", *20th Int. Workshop on Robotics in Alpe-Adria-Danube Region RAAD 2011*, Brno, Czech Republic, October 5-7, 2011.
 24. G. Măceșanu, **S.M. Grigorescu** and F. Moldoveanu, "An Active Stereo Vision Control System Based on PTZ Cameras for Robust Robotic Perception", *20th Int. Workshop on Robotics in Alpe-Adria-Danube Region RAAD 2011*, Brno, Czech Republic, October 5-7, 2011.
 25. **S.M. Grigorescu** and F. Moldoveanu, "Controlling Depth Estimation for Robust Robotic Perception", *18th International Federation of Automatic Control – IFAC World Congress*, Milano, Italy, 28 August – 02 September, 2011.
 26. Ch. Boldișor, V. Comnac, S. Coman and **S.M. Grigorescu**, "A Combined Experience and Model Based Design Methodology of a Fuzzy Control System for Mean Arterial Pressure and Cardiac Output", *18th International Federation of Automatic Control – IFAC World Congress*, Milano, Italy, 28 August– 02 September, 2011.
 27. **S.M. Grigorescu** and A. Gräser, "Robust Visual Processing for Service Robotics Tasks", *Proceedings of the X Triennial International Conference – SAUM 2010*, Niš, Serbia, 10+12 November, 2010 (**invited paper**).
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 29. R. Tschakarow, **S.M. Grigorescu** and A. Gräser, "FRIEND – a Dependable Semiautonomous Rehabilitation Robot", *Proceedings of the Joint 41th International Symposium on Robotics and 6th German Conference on Robotics*, pp. 327-378, Munich, Germany, June 07+09, 2010 (**Indexed by ISI Thomson Reuters**).
 30. T. Heyer, **S.M. Grigorescu** and A. Gräser, "Camera Calibration for Reliable Object Manipulation in Care-providing System FRIEND", *Proceedings of the Joint 41th International Symposium on Robotics and 6th German Conference on Robotics*, pp. 446-451, Munich, Germany, June 07+09, 2010 (**Indexed by ISI Thomson Reuters**).

31. **S.M. Grigorescu**, D. Ristic-Durrant and A. Gräser, "RObust machine Vision for Service robotic system FRIEND", *Proceedings of the 2009 IEEE-RSJ International Conference on Intelligent Robots and Systems IROS*, St. Louis, USA, October 10÷15, 2009, Tome II, pp. 3574÷3581, ISBN 978-1-4244-3803-7 (**Indexed by ISI Thomson Reuters**).
32. **S.M. Grigorescu**, D. Ristic-Durrant, S.K. Vupalla and A. Gräser, "Closed-Loop Control in Image Processing for Improvement of Object Recognition", *Proceedings of the 17th IFAC World Congress*, Seoul, Korea, July 06÷11, 2008, ISBN: 978-3-902661-00-5, DOI: 10.3182/20080706-5-KR-1001.2132.
33. S.K. Vupalla, **S.M. Grigorescu**, D. Ristic-Durrant and A. Gräser, "Robust Color Object Recognition for a Service Robotic Task in the System", *Proceedings of the 10th IEEE International Conference on Rehabilitation Robotics ICORR 2007*, Noordwijk, Netherlands, June 13÷15, 2007, pp. 704 - 713, ISBN 978-1-4244-1320-1, DOI: [10.1109/ICORR.2007.4428503](https://doi.org/10.1109/ICORR.2007.4428503) (IEEE Xplore, INSPEC Accession No.: 9813131) (**Indexed by ISI Thomson Reuters**).
34. **S.M. Grigorescu**, O. Prenzel and A. Gräser, "Model Driven Developed Machine Vision System for Service Robotics", *Proceedings of the 12th International Conference on Optimization of Electrical and Electronic Equipments - OPTIM 2010*, pp. 877-883, Brasov, Romania, May 20÷22, 2010 (**Indexed by ISI Thomson Reuters**).
35. **S.M. Grigorescu** and A. Gräser, "Robust Machine Vision Framework for Localization of Unknown Objects", *Proceedings of the 11th International Conference on Optimization of Electrical and Electronic Equipments – OPTIM 2008*, Braşov, Romania, May 22÷23, 2008, Vol. III, pp. 127÷130, ISBN 978-1-4244-1544-1, DOI: [10.1109/OPTIM.2008.4602468](https://doi.org/10.1109/OPTIM.2008.4602468) (IEEE Cat. No.: 08EX1996, Library of Congress: 2007905111) (**Indexed by ISI Thomson Reuters**).
36. C. Suci, F. Moldoveanu, R. Câmpănu, I. Baci, **S.M. Grigorescu**, B. Cârstea and V. Voinea, "GPRS Based System for Atmospheric Pollution Monitoring and Warning", *Proceedings of the 2006 IEEE-TTTC International Conference on Automation, Quality & Testing, Robotics – AQTR 2006*, Cluj-Napoca, Romania, May 25÷28, 2006, Tome II, pp.193÷198, ISBN 1-4244-0360-X (IEEE Cat. No.: 06EX1370, Library of Congress: 2006924077, IEEE Xplore INSPEC Accession Number: 9175432, cotată ISI Proceedings) (**Indexed by ISI Thomson Reuters**).
37. F. Moldoveanu, C. Suci, I. Baci, **S.M. Grigorescu**, B. Cârstea and V. Voinea, "Microcontroller Based SCADA System for Air Pollution Monitoring and Warning", *Proceedings of the 10th International Conference on Optimization of Electrical and Electronic Equipments – OPTIM 2006*, Braşov, Romania, May 18÷19, 2006, Vol. III, pp. 185÷190, ISBN 973-635-705-8 (**Indexed by ISI Thomson Reuters**).

7. GRANTURI:

1. Contr. Nr. 6280 / 06.06.2017 – "Sistem Cognitiv pentru Autovehicule Autonome (SCAA)". Beneficiar: Universitatea Transilvania din Braşov (valoare 64.448 RON). Finanţator: Elektrobot Automotive. **Coordonator de proiect.**
2. Contr. Nr. FKZ: 524 40001 01 IMF01A / 2006-2009 – "AMAROB - Autonome Manipulatorsteuerung für Rehabilitationsroboter (Control autonom al braţelor manipulator pentru roboţi de reabilitare)". Beneficiar: Institutul de Automatică, Universitatea Bremen, Germania (valoare 1.273.916,00 EUR). Finanţator: Ministerul German pentru Educaţie şi Cercetare (BMBF – Bundesministerium fuer Bildung und Forschung). **Coordonator de proiect.**
3. Contr. Nr. MTKD-CT-2004-014249 – "Multimodal image processing methods for the visual control of robots (Metode de procesare de imagini multimodale pentru controlul vizual al roboţilor)". Beneficiar: Institutul de Automatică, Universitatea Bremen, Germania (valoare 10.200,00 EUR). Finanţator: EU, Proiect Limesy. Durata:

01.11.2006 – 31.10.2007. **Coordonator de proiect.**

4. Contract de cooperare între Universitatea Bremen, Institutul de Automatică și Universitatea Transilvania din Brașov, Departamentul de Automatică și Tehnologia Informației (valoare: 4.432,58 EUR). Finanțator: Universitatea Bremen, Institutul de Automatică. Durata: 15.07.2010 – 14.07.2013. **Coordonator de proiect.**
5. Contr. Sponsorizare – "Sponsorizarea cu echipamente de calcul și renovarea laboratorului V III 15, din cadrul Dep. de Automatică și Tehnologia Informației, Fac. de Inginerie Electrică și Știința Calculatoarelor". Beneficiar: Universitatea Transilvania din Brașov (valoare 87.122,59 RON). Finanțator: Elektrobit Automotive. **Coordonator de proiect.**
6. Contr. Nr. 13866 / 30.10.2019 – "*Sistem inteligent de recunoaștere facială pentru facilitarea accesului în zone rezidențiale*". Beneficiar: Universitatea Transilvania din Brașov (valoare 50.632 RON). Finanțator: RG Design SRL.
7. Contr. Nr. 6885 / 26.06.2019 – "*Sistem inteligent de tip HMI (Human Machine Interface) pentru controlul prin gesturi*". Beneficiar: Universitatea Transilvania din Brașov (valoare 48.626 RON). Finanțator: Creature Promotions SRL.

8. GRANTURI DE MOBILITATE:

1. Teaching mobility contract for Korea Advanced Institute of Science and Technology, Human-friendly Welfare Robot System Research Center, Daejeon, South Korea (valoare: 1.475,00 EUR). Finanțator: Universitatea Bremen. Durata: 23.06.2008 – 25.07.2008.
2. Teaching mobility contract for Korea Advanced Institute of Science and Technology, Center for Robot Vision and Perception, Daejeon, South Korea (valoare: 1.475,00 EUR). Finanțator: Universitatea Bremen. Durata: 08.11.2009 – 02.12.2009.
3. Exchange researcher with the University of Electro-Communications, Tokyo, Japan. Finanțator: German Academic Exchange Service (Deutscher Akademischer Austausch Dienst – DAAD). Durata: 19.11.2009 – 22.11.2009.
4. Teaching mobility contract for University Jaume I, Computer Science and Engineering Department, Castellon de la Plana, Spain (valoare: 1.100,00 EUR). Finanțator: Universitatea Bremen. Durata: 19.11.2007 – 24.11.2007.
5. Teaching mobility contract for University Jaume I, Computer Science and Engineering Department, Castellon de la Plana, Spain (valoare: 1.100,00 EUR). Finanțator: Universitatea Bremen. Durata: 24.03.2007 – 30.03.2007.
6. Teaching mobility contract for Transilvania University of Brasov, 2010 (valoare: 600,00 EUR). Finanțator: Universitatea Bremen.
7. Teaching mobility contract for Transilvania University of Brasov, 2009 (valoare: 600,00 EUR). Finanțator: Universitatea Bremen.
8. Teaching mobility contract for Transilvania University of Brasov, 2008 (valoare: 600,00 EUR). Finanțator: Universitatea Bremen.
9. Teaching mobility contract for Transilvania University of Brasov, 2007 (valoare: 600,00 EUR). Finanțator: Universitatea Bremen.

9. ALTE REZULTATE:

1. Membru al board-ului *Open Artificial Intelligence Journal*, Bentham Open Publishing.
2. Fondator al grupului de cercetare ROVIS (Robust Vision and Control Laboratory): <http://rovis.unitbv.ro>.
3. Invited paper at the *X Triennial International Conference – SAUM 2010*, Niš, Serbia.
4. Chairman-ul sesiunii "Rehabilitation Robotics" din cadrul *International Conference on Intelligent Robots and Systems*, St. Louis, USA, 2009.
5. Chairman-ul sesiunii "Perception and Vision" din cadrul *Congress of the International Federation of Automatic Control*, Milan, Italy, 2011.

6. Organizator al sesiunii "Robotics, Vision and Real-time Data Processing" din cadrul *International Conference on Optimization of Electrical and Electronic Equipment OPTIM 2012*.
7. Chairman-ul sesiunii "Applied Mathematics I" din cadrul *Congress on Information Technology, Computational and Experimental Physics CITCEP 2015*, Cracow, Poland, 2015.
8. Cercetător invitat la universitățile:
 - a. KAIST, Daejeon, Korea;
 - b. JAUME I, Castellon de la Plana, Spania;
 - c. National University of Electro-Communications, Japan;
 - d. Universitatea Szechenyi Istvan, Gyor, Ungaria.
9. Premiul cel mai bun poster al conferinței 30th *Colloquium of Automation*, Salzhausen, Germania, pentru lucrarea Robust Object Classification and Recognition in Service Robotics.
10. Diplomă de excelență din partea *Societății Române de Automatică și Informatică Tehnică (SRAIT)* pentru finalizarea ca șef de promoție a specializării Automatică și Informatică Tehnică.
11. Premiul I în cadrul *Sesiunii de Comunicări Studentești al Catedrei de Automatică* pentru lucrarea Pollution Guard – Air Pollution Monitoring and Warning System.
12. Mențiune în concursul *IEEE Computer Society International Design Competition*, pentru lucrarea Pollution Guard – A SCADA system for air pollution monitoring and warning.
13. Premiul I în cadrul *Sesiunii de Comunicări Studentești al Catedrei de Automatică* pentru lucrarea Synthesis of a neural command for controlling a 3-phase stepper motor using the DS80C420 microcontroller.
14. Evaluator în cadrul unui număr de jurnale și conferințe recunoscute internațional, precum. Lista selectată a evaluărilor poate fi accesată via <https://publons.com/>, la adresa <https://publons.com/researcher/1644235/sorin-grigorescu/>
 - a. IEEE Trans. on Pattern Recognition and Machine Intelligence, *IEEE Press*;
 - b. IEEE Trans. on Neural Networks and Learning Systems, *IEEE Press*;
 - c. IEEE Trans. on Systems, Man and Cybernetics: Part C, *IEEE Press*;
 - d. IEEE Robotics and Automation Letters, *IEEE Press*;
 - e. Journal of Intelligent and Robotic Systems, *Springer*;
 - f. ROBOTICA, *Cambridge University Press*;
 - g. Journal of Machine Vision and Applications, *Springer*;
 - h. Journal of Robotics and Autonomous Systems, *Elsevier*;
 - i. Journal of Visual Communication and Image Representation, *Elsevier*;
 - j. Int. Conf. on Robotics and Automation ICRA;
 - k. Int. Conf. on Intelligent Robots and Systems IROS;
 - l. Int. Conf. on Humanoid Robots;
 - m. Int. Conf. on Automatic Control.

9. SITUAȚIE STATISTICĂ A PUBLICAȚILOR RECENTE:

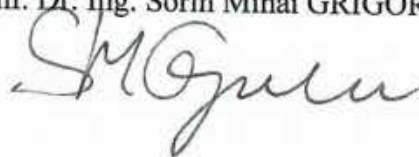
Am publicat în calitate de prim autor sau coautor un număr de peste 70 de lucrări științifice în buletine, cărți și reviste de specialitate, respectiv în volumele unor conferințe științifice internaționale, după cum urmează:

- a) H-index: 11
- b) I10-index: 13
- c) jurnale: 23
- d) jurnale ISI: 9
- e) conferințe: 37
- f) conferințe ISI: 28
- g) brevete de invenție internaționale: 1

- h) cărți/monografii: 11
- i) granturi obținute: 7
- j) granturi de mobilitate: 9
- k) citări (Google Scholar, fără autocitări): 170

Brașov, 09.07.2020

Conf. Dr. Ing. Sorin Mihai GRIGORESCU

A handwritten signature in black ink, appearing to read 'S. Grigorescu', written in a cursive style.