

Universitatea Transilvania Braşov  
Facultatea de Inginerie Electrică și Știința Calculatoarelor  
Departamentul: Automatică și Tehnologia Informației

Numele și prenumele: Boboc Răzvan Gabriel

## **L I S T A**

### **lucrărilor științifice în domeniul disciplinelor din postul didactic**

#### **A. Teza de doctorat**

Interacțiunea naturală om-robot pentru aplicații de robotică asistivă, Teză de doctorat, Universitatea Transilvania Braşov, 2015.

#### **B. Cărți și capitole în cărți publicate în ultimii 10 ani**

1. **Boboc, R. G.**, Toma, M. I., Moga, H., Panfir, A. N. and Talabă, D., An Omnidirectional System for Navigation in Virtual Environments, in L. M. Camarinha-Matos, S. Tomic and P. Graça (eds.) Proceedings of the Technological Innovation for the Internet of Things - 4th IFIP WG 5.5/SOCOLNET Doctoral Conference on Computing, Electrical and Industrial Systems, DoCEIS 2013, Costa de Caparica, Portugal, pp. 192-199, 2013.
2. Gîrbacia, F., **Boboc, R. G.**, Gherman, B., Gîrbacia, T., Pîsla, D, Planning of Needle Insertion for Robotic-Assisted Prostate Biopsy in Augmented Reality Using RGB-D Camera. In: Rodić A., Borangiu T. (eds) Advances in Robot Design and Intelligent Control, No.540, Chapter No: 56, pp. 515-522, Springer International Publishing, DOI:10.1007/978-3-319-49058-8\_56, ISBN: 978-3-319-49057-1, 2016.
3. **Boboc, R. G.**, Gîrbacia, F., Postelnicu, C.C., Gîrbacia, T., Evaluation of Using Mobile Devices for 3D Reconstruction of Cultural Heritage Artifacts. In: Duguleană M., Carrozzino M., Gams M., Tanea I. (eds) VR Technologies in Cultural Heritage. VRTCH 2018. Communications in Computer and Information Science, vol 904, pp 46-59. Springer, Cham, ISBN 978-3-030-05818-0, 2018.
4. Postelnicu, C.-C., Gîrbacia, F., Voinea, G., D., **Boboc, R. G.**, Towards Hybrid Multimodal Brain Computer Interface for Robotic Arm Command, In: Schmorow D., Fidopiastis C. (eds) Augmented Cognition. HCII 2019. Lecture Notes in Computer Science, vol 11580. Springer, Cham, 2019.
5. Antonya, Cs., **Boboc, R. G.**, Îndrumare de Mecanisme – Teorie și exemple, Editura Universității Transilvania, ISBN: 978-606-19-1296-4, 2020.

#### **C. Lucrări indexate ISI / BDI publicate în ultimii 10 ani**

1. Banu, S. M., Danciu, G. M., **Boboc, R. G.**, Moga, H. and Balany, C. A novel approach for face expressions recognition, in Proceedings of the 10th IEEE Jubilee International



- Symposium on Intelligent Systems and Informatics (SISY 2012), Subotica, Serbia, pp. 537-541, 2012.
2. **Boboc, R. G.**, Moga, H. and Talabă, D., A Review of Current Applications in Teleoperation of Mobile Robots, in Bulletin of the Transilvania University of Braşov Series I: Engineering Sciences 5(54), 2012.
  3. **Boboc, R. G.**, Moga, H., Talabă, D. and Pană, G., Fuzzy logic approach for a locomotion interface control, in Proceedings of Roedunet International Conference (RoEduNet), Sinaia, Romania, 2013.
  4. **Boboc, R. G.**, Toma, M. I., Panfir, A. N. and Talabă, D., Learning new skills by a humanoid robot through imitation, in Proceedings of IEEE 14th International Symposium on the Computational Intelligence and Informatics (CINTI), pp. 515-519, 2013.
  5. Panfir, A. N., **Boboc, R. G.** and Mogan, G., NAO Robots collaboration for object manipulation, in Applied Mechanics and Materials, vol. 332, pp. 218-223, 2013.
  6. Panfir, A. N., **Boboc, R. G.** and Mogan, G., Intelligent mobile robots cooperation within a tasks oriented environment, in Proceedings of the IEEE 14th International Symposium on Computational Intelligence and Informatics (CINTI), pp. 243-248, 2013.
  7. Panfir, A. N., Butilă, V. E., **Boboc, R. G.** and Mogan, G., Controlling Humanoid NAO Robots Using a Web Interface, in AWERProcedia Information Technology & Computer Science, vol. 3, pp. 1689-1683, 2013.
  8. **Boboc, R. G.**, Moga, H. and Talabă, D., An Educational Humanoid Laboratory Tour Guide Robot, in Procedia - Social and Behavioral Sciences, vol. 141, pp. 424-430, 2014.
  9. **Boboc, R. G.**, Duguleană, M. and Talabă, D., Natural Interaction with an Assistive Humanoid Robot, Applied Mechanics and Materials, Trans Tech Publications, Switzerland, vol. 762, pp. 189-194, 2015.
  10. **Boboc, R.G.**, Duguleană, M., Mogan, G.L. Using body gestures and voice commands for assistive interaction. Recent Advances in Mechanics, Mechatronics Civil, Chemical and Industrial Engineering, pp.169-176, 2015.
  11. **Boboc, R. G.**, Antonya, C., Point-and-command Paradigm for Interaction with Assistive Robots, International Journal of Advanced Robotic Systems, vol. 12, no. 6, 2015, ISSN: 1729-8814, factor de impact: 1.652.
  12. **Boboc, R. G.**, Gîrbacia, F., Duguleană, M., Tavčar, A., A handheld Augmented Reality to revive a demolished Reformed Church from Braşov, in VRIC '17 Proceedings of the Virtual Reality International Conference - Laval Virtual, Laval, France, 2017.
  13. Pop, C.M., Mogan, G.-L., **Boboc, R.G.** Real-time object detection and recognition system using opencv via surf algorithm in emgu cv for robotic handling in libraries. International Journal of Modeling Optimization 7 (5), 2017, pp. 265-269.
  14. Dumitru, A. I., Gîrbacia, T., **Boboc, R. G.**, Postelnicu, C. C., Mogan, G. L., Effects of smartphone based advanced driver assistance system on distracted driving behavior: A simulator study, Computers in Human Behavior, vol. 83, pp. 1-7, 2018, factor de impact: 8.957.
  15. **Boboc, R. G.**, Voinea, G.-D., Postelnicu, C.-C., Gîrbacia, F. Usability assessment of a multimodal hybrid interface for robotic arm command. In: Proceedings of the ICVL 2019, Bucureşti, Romania.
  16. Voinea, G.-D., **Boboc, R. G.**, Gîrbacia, F., Postelnicu, C.-C. Technology acceptance of a hybrid brain-computer interface for instruction manual browsing. In: Proceedings of the ICVL 2019, Bucureşti, Romania.

17. Carrozzino, M., Voinea, G. D., Duguleană, M., **Boboc, R. G.**, Bergamasco, M. Comparing Innovative XR Systems in Cultural Heritage. a Case Study, The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XLII-2/W11, GEORES 2019 – 2nd International Conference of Geomatics and Restoration, Milan, Italy, 2019.
18. **Boboc, R.G.**, Duguleană, M., Voinea, G.-D., Postelnicu, C.-C., Popovici, D.-M., Carrozzino, M. Mobile augmented reality for cultural heritage: Following the footsteps of ovid among different locations in europe. Sustainability, vol. 11, no. 4, 1167, 2019; factor de impact: 3.889.
19. **Boboc, R.G.**, Gîrbacia, F., Butilă, E.V. The Application of Augmented Reality in the Automotive Industry: A Systematic Literature Review, Applied Sciences, vol. 10, nr. 4259, 2020; impact factor: 2.838.
20. Antonya, C., **Boboc, R. G.** Computational efficiency of multi-body systems dynamic models. Robotica, vol. 39, no. 12, pp. 1-16, 2021; factor de impact: 2.406.
21. **Boboc, R. G.**, Chiriac, R. L., Antonya, Cs. How Augmented Reality Could Improve the Student's Attraction to Learn Mechanisms. Electronics, vol. 10, no. 2, 2012; factor de impact: 2.690.
22. Chiriac R. L., Chiru A., **Boboc, R. G.**, Kurella U. Advanced Engine Technologies for Turbochargers Solutions. Applied Sciences, vol. 11, nr. 21, 2021; factor de impact: 2.838.
23. Butilă, E.V., **Boboc, R.G.**, Urban Traffic Monitoring and Analysis Using Unmanned Aerial Vehicles (UAVs): A Systematic Literature Review, Remote Sensing, vol. 14, nr. 3, 620, 2022; factor de impact: 5.349.
24. Burlacu, M., **Boboc, R.G.**, Butilă, E.V., Smart Cities and Transportation: Reviewing the Scientific Character of the Theories. Sustainability, vol. 14, nr. 13, 8109, 2022; factor de impact: 3.889.
25. **Boboc, R.G.**, Voinea, G.D., Buzdugan, I.-D., Antonya, C., Talking on the Phone While Driving: A Literature Review on Driving Simulator Studies, International Journal of Environmental Research and Public Health, vol. 19, nr. 17, 10554, 2022; factor de impact: 4.814.
26. **Boboc, R.G.**, Băutu, E., Gîrbacia, F., Popovici, N., Popovici, D.-M., Augmented Reality in Cultural Heritage: An Overview of the Last Decade of Applications, Applied Sciences, vol. 12, nr. 19, 9859, 2022; factor de impact: 2.838.

#### **D. Lucrări publicate în ultimii 10 ani în reviste și volume de conferințe cu referenți (neindexate)**

##### **- Reviste**

##### **- Selecție cu maximum 20 lucrări în volume de conferințe**

1. **Boboc, R. G.** and Talabă, D., Point-and-command Paradigm in Human - Robot Interaction, in Proceedings of the the 6th Győr Symposium and 3rd Hungarian-Polish and 1st Hungarian-Romanian Joint Conference on Computational Intelligence, Győr , Hungary, pp. 21-27, 2014.
2. **Boboc, R. G.**, Gîrbacia, F., Tavčar, A., Butilă, E., Reviving the memory of demolished buildings using Augmented Reality, in Proceedings of the 19th international multi-conference Information Society 2016 eHeritage Workshop – Ljubljana (Slovenia), October 10-14, pp. 5-8, 2016.



3. Tavčar, A., Antonya,, C., **Boboc, R. G.**, Jovan, L. N., Gams, M., Computer-generated knowledge base for virtual assistants, in proceedings of the 19th international multi-conference Information Society 2016 eHeritage Workshop – Ljubljana (Slovenia), October 10-14, pp. 31-32, 2016.
4. **Boboc, R. G.**, Girbacia, F., Postelnicu, C. C., Voinea, G. D., Evaluation of using Mobile Devices for 3D Reconstruction of Accidents, The IVth International Congress of Automotive and Transport Engineering – AMMA 2018.
5. Voinea, G. D., **Boboc, R.G.**, Girbacia, F., Postelnicu, C. C., Low Annoyance Smartphone Based ADAS – Design Evaluation Using AttrakDiff, The IVth International Congress of Automotive and Transport Engineering – AMMA 2018.
6. **Boboc, R.G.**, Antonya, C., Using 3d printing and augmented reality for teaching and learning in mechanical engineering higher education. In Proceedings of the 13th International Conference on Education and New Learning Technologies Online Conference, 2021.

#### **E. Brevete obținute în întreaga activitate**

**Data: 19.12.2022**

**Semnătura:**

