LISTA DE LUCRĂRI

Conf. dr. ing. ec. Duguleană Mihai

Teza de Doctorat

Învățarea roboților mobili pentru deplasare şi manipulare în medii industriale, 2011.

Teza/Proiect Post-Doctorat

Asistent inteligent de navigare auto pentru dispozitive mobile bazat pe urmărirea privirii, 2014.

Cărți

1. **Duguleană Mihai.** Programarea prin învățare a roboților mobili pe roți, Editura Universității "Transilvania" din Braşov, 2014, ISBN 978-606-19-0472-3.
2. **Duguleană Mihai.** Îndrumar de laborator pentru Realitate Virtuală în Robotică, Editura Universității "Transilvania" din Braşov, 2017, ISBN: 978-606-19-0939-1.
3. **Duguleană Mihai**. Economie pentru Ingineri - Indrumar de Laborator, Editura Universității "Transilvania" din Brașov, 2017, ISBN: 978-606-19-0939-1.
4. **Duguleană Mihai.** Noțiuni de Economie pentru Ingineri, Editura Universității "Transilvania" din Brașov, 2017, ISBN: 978-606-19-0938-4.
5. **Duguleană Mihai,** Gîrbacia Florin, Barothi Laszlo. Explorarea Automobilului Secolului XXI, Editura Universității "Transilvania" din Brașov, 2019. ISBN: 978-606-19-1125-7
6. Gîrbacia Florin, **Duguleană Mihai**. Virtual and augmented reality in automotive design and maintenance: course notes", Editura Universității "Transilvania" din Brașov, 2019. ISBN: 978-606-19-1124-0

Capitole în Cărți (format Springer)

1. **Duguleană M.**, Barbuceanu F.G., Mogan G. (2011) Evaluating Human-Robot Interaction during a Manipulation Experiment Conducted in Immersive Virtual Reality. In: Shumaker R. (eds) Virtual and Mixed Reality - New Trends. VMR 2011. Lecture Notes in Computer Science, vol 6773. Springer, ISBN 978-3-642-22020-3. https://link.springer.com/chapter/10.1007/978-3-642-22021-0_19
2. **Duguleană M.,** Mogan G. (2010) Using Eye Blinking for EOG-Based Robot Control. In: Camarinha-Matos L.M., Pereira P., Ribeiro L. (eds) Emerging Trends in Technological Innovation. DoCEIS 2010. IFIP Advances in Information and Communication Technology, vol 314. Springer, ISBN 978-3-642-11627-8. https://link.springer.com/chapter/10.1007/978-3-642-11628-5_37
3. Barbuceanu F., Antonya C., **Duguleană M**., Rusak Z. (2011) Attentive User Interface for Interaction within Virtual Reality Environments Based on Gaze Analysis. In: Jacko J.A. (eds) Human-Computer Interaction. Interaction Techniques and Environments. HCI 2011. Lecture Notes in Computer Science, vol 6762. Springer, ISBN 978-3-642-21604-6. https://link.springer.com/chapter/10.1007/978-3-642-21605-3_23
4. Postelnicu CC., Machidon OM., Girbacia F., Voinea GD., **Duguleană M.** (2016) Effects of Playing Mobile Games While Driving. In: Streitz N., Markopoulos P. (eds) Distributed, Ambient and Pervasive Interactions. DAPI 2016. Lecture Notes in Computer Science, vol 9749. Springer, ISBN 978-3-319-39861-7. https://link.springer.com/chapter/10.1007/978-3-319-39862-4_27
5. **Duguleană M.,** Brodi R., Girbacia F., Postelnicu C., Machidon O., Carrozzino M. (2016) Time-Travelling with Mobile Augmented Reality: A Case Study on the Piazza dei Miracoli. In: Ioannides M. et al. (eds) Digital Heritage. Progress in Cultural Heritage: Documentation, Preservation, and Protection. EuroMed 2016. Lecture Notes in Computer Science, vol 10058. Springer, ISBN 978-3-319-48495-2. https://link.springer.com/chapter/10.1007/978-3-319-48496-9_73
6. Carrozzino M., Lorenzini C., **Duguleană M.**, Evangelista C., Brondi R., Tecchia F., Bergamasco M. (2016) An Immersive VR Experience to Learn the Craft of Printmaking. In: De Paolis L., Mongelli A. (eds) Augmented Reality, Virtual Reality, and Computer Graphics.

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7. **Duguleană M.**, Girbacia F., Postelnicu C., Beraru A., Mogan G. (2015) Aspects Concerning the Calibration Procedure for a Dual Camera Smartphone Based ADAS. In: Streitz N., Markopoulos P. (eds) Distributed, Ambient, and Pervasive Interactions. DAPI 2015. Lecture Notes in Computer Science, vol 9189. Springer, ISBN 978-3-319-40650-3. https://link.springer.com/chapter/10.1007/978-3-319-20804-6_37
8. Bărbuceanu F., **Duguleană M.,** Vlad S., Nedelcu A. (2011) Evaluation of the Average Selection Speed Ratio between an Eye Tracking and a Head Tracking Interaction Interface. In: Camarinha-Matos L.M. (eds) Technological Innovation for Sustainability. DoCEIS 2011. IFIP Advances in Information and Communication Technology, vol 349. Springer, ISBN 978-3-642-19169-5. https://link.springer.com/chapter/10.1007/978-3-642-19170-1_20
9. Voinea, G. D., Postelnicu, C., & **Duguleană, M**. (2017, June). Towards Using an Augmented Reality Mobile Assistant for Improving Driving Skills. In International Conference on Technologies for E-Learning and Digital Entertainment (pp. 52-55). Springer. https://link.springer.com/chapter/10.1007/978-3-319-65849-0_7
10. **Duguleană, M.,** & Voinea, G. D. (2018, July). Enhancing the Experience of Visiting Outdoor Heritage Sites Using Handheld AR. In International Conference on Human-Computer Interaction (pp. 184-191). Springer. https://link.springer.com/chapter/10.1007/978-3-319-92285-0_26
11. **Duguleană, M.,** & Postelnicu, C. C. (2018, May). Towards Preserving Transylvanian Fortified Churches in Virtual Reality. In International Conference on VR Technologies in Cultural Heritage (pp. 34-45). Springer. https://link.springer.com/chapter/10.1007/978-3-030-05819-7_4
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13. Carrozzino, M., Evangelista, C., Faita, C., **Duguleană, M.**, & Bergamasco, M. (2017, June). A Virtual Travel in Leonardo's Codex of Flight. In International Conference on Augmented Reality, Virtual Reality and Computer Graphics (pp. 310-318). Springer. https://link.springer.com/chapter/10.1007/978-3-319-60928-7_27

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1. **Duguleană, M.**, Barbuceanu, F. G., Teirelbar, A., & Mogan, G. (2012). Obstacle avoidance of redundant manipulators using neural networks based reinforcement learning. Robotics and Computer-Integrated Manufacturing, 28(2), 132-146.pp. 840-848, (2012) DOI: 10.1016/j.rcim.2011.07.004 **Factor de impact: 3.464** https://www.sciencedirect.com/science/article/pii/S0736584511000962
2. **Duguleană, M.,** & Mogan, G. (2016). Neural networks based reinforcement learning for mobile robots obstacle avoidance. Expert Systems with Applications, 62, 104-115. DOI: 10.1016/j.eswa.2016.06.021 **Factor de impact: 3.768** https://www.sciencedirect.com/science/article/pii/S0957417416303001
3. Roșca, L., & **Duguleană, M.** (2016). An Online Observer for Minimization of Pulsating Torque in SMPM Motors. PloS one, 11(4), e0153255. DOI: 10.1371/journal.pone.0153255 **Factor de impact: 2.766** https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4835102/
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13. **Duguleană, M.,** & Barbuceanu, F. G. (2010). Designing of virtual reality environments for mobile robots programming. In Solid State Phenomena (Vol. 166, pp. 185-190). Trans Tech Publications. https://www.scientific.net/SSP.166-167.185
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1. Duguleana, M., Girbacia, F., Postelnicu, C., Brodi, R., & Carrozzino, M. (2016). Exploring Pisa Monuments Using Mobile Augmented Reality. World Academy of Science, Engineering and Technology, International Journal of Computer, Electrical, Automation, Control and Information Engineering, 10 (11), 1885-1888. https://waset.org/Publications/exploring-pisa-monuments-using-mobile-augmented-reality/10005700
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3. Boboc, R. G., Duguleană, M., & Talabă, D. (2015). Natural Interaction with an Assistive Humanoid Robot. Applied Mechanics & Materials, 762. https://www.scientific.net/AMM.762.189
4. Boboc, R. G., Gîrbacia, F., Duguleană, M., & Tavčar, A. (2017, March). A handheld Augmented Reality to revive a demolished Reformed Church from Braşov. In Proceedings of the Virtual Reality International Conference-Laval Virtual 2017 (p. 18). ACM. https://dl.acm.org/citation.cfm?id=3110311
5. Duguleana, M., & Mogan, G. (2008). Aspects Concerning a Mobile Robot Cognitive System. Bulletin of the Transilvania University of Brasov. Engineering Sciences. Series I, 1, 129. http://webbut.unitbv.ro/BU2008/BULETIN%20I%20PDF/Industrial%20Enginering/Duguleana%20M_08.pdf
6. Duguleană M., Considerations for Designing Efficient User Interfaces in Augmented Reality Enabled Head-Up Displays (2018) In Proceedings of the 4th International Congress of Automotive and Transport Engineering (AMMA'18), Technical University of Cluj-Napoca. http://www.amma2018.ro/index.php/amma/2018/paper/view/142

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1. Octavian-Mihai Machidon, Raffaello Brondi, Mihai Duguleană. Cloud-based development of a natural language conversational virtual agent for cultural heritage applications. Information Society 2016 eHeritage Workshop – Ljubljiana (Slovenia), October 10-14 2016, In proceedings of the 19th international multi-conference Information Society, pp. 12-15. http://www.eheritage.org/ro/lucrari-publicate/
2. Postelnicu, C., Duguleană, M., Garbacia, F., & Talaba, D. (2014). Towards P300 based brain computer interface for Computer Aided Design. In Conference and Exhibition of the European Association of Virtual and Augmented Reality, EuroVR (pp. 107-111). https://diglib.eg.org/handle/10.2312/eurovr.20141347.107-111
3. Mureşan, Laura; Po incu, C.; Duguleană, Mihai. Ecological Responsibility, Component of the Corporate Social Responsibility. In: Proceedings of WSEAS International Conference on Risk Management, Assessment and Mitigation (RIMA'10) Bucureşti, România. 2010. p. 318-322. https://www.researchgate.net/publication/267934654_Ecological_Responsibility_Component_of_the_Corporate_Social_Responsibility

Proiecte – coordonator sau responsabil

1. Coordonator proiect Orizont 2020 intitulat eHERITAGE ('Expanding the Research and Innovation Capacity in Cultural Heritage Virtual Reality Applications'), grant nr. 692103 în valoare de 975625 EUR.
2. Coordonator proiect Premiere H2020 (PN-III-P3-3.6-H2020-2016), Contract numărul: 18/2016, în valoare de 42000 EUR.

3. Responsabil științific BRAINSPACE (‘Interacțiune multimodală cu mașini pentru aplicații spațiale bazate pe utilizarea biopotențialelor omului’), sponsorizat de ROSA cu suma de 600000 RON.
4. Director tehnic NAVIEYES (‘Asistent inteligent de navigare auto pentru dispozitive mobile bazat pe urmărirea privirii’) finanțat de UEFISCDI (PN-II-PT-PCCA-2013-4-2023) cu suma de 894250 RON.

Proiecte membru în echipă

1. PROROB (‘Programarea cognitiva a robotilor din celulele flexibile de fabricatie‘), cod CNCSIS ID_775/2008
2. SPINE (‘Sistem de diagnosticare şi terapie a afec iunilor coloanei vertebrale‘), PN-II-PT-PCCA-2013-4-1596, Contract Nr. 227/2014
3. ROBOCORE (‘Biopsia prostatei asistata robotic, o metoda inovativa de mare precizie‘), Contract numărul 247/2014 PN-II-PT-PCCA-2013-4-0647

Selecție 10 publicații relevante

1. **Duguleană, M.**, & Mogan, G. “Neural networks based reinforcement learning for mobile robots obstacle avoidance”. Expert Systems with Applications, 62, 104-115, 2016.
2. Roșca, L., & **Duguleană, M.** “An Online Observer for Minimization of Pulsating Torque in SMPM Motors”. PloS one, 11(4), e0153255, 2016.
3. **Duguleană M.**, Girbacia F., Postelnicu C., Beraru A., Mogan G. “Aspects Concerning the Calibration Procedure for a Dual Camera Smartphone Based ADAS”. Lecture Notes in Computer Science, vol 9189. Springer, Cham, ISBN 978-3-319-40650-3, 2015.
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5. **Duguleană, M.**, Dumitru, A., Postelnicu, C., Mogan Ghe., "Video-based evaluation of driver's visual attention using smartphones". The 6th International Conference on Information, Intelligence, Systems and Applications (IISA), 2015.
6. Postelnicu CC., Machidon OM., Girbacia F., Voinea GD., **Duguleană M.** "Effects of Playing Mobile Games While Driving". Lecture Notes in Computer Science, vol 9749. Springer, Cham, ISBN 978-3-319-39861-7, 2016.
7. **Duguleană M.,** "Considerations for Designing Efficient User Interfaces in Augmented Reality Enabled Head-Up Displays". (2018) In Proceedings of the 4th International Congress of Automotive and Transport Engineering (AMMA'18), Technical University of Cluj-Napoca.
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10. Nedelcu, A. V., Machedon-Pisu, M., **Duguleana, M.**, & Talaba, D. (2015). "Pervasive radio mapping of industrial environments using a virtual reality approach". The Scientific World Journal, 2015.

Candidat,

Conf. dr. ing. ec. Duguleană Mihai