Information	Mihai Duguleană

🌐 https://duguleana.com

Gender M | Nationality Romanian

PROFESSIONAL EXPERIENCE

Nov 2023 – present **Head of department**
"Transilvania" University of Brașov, Brașov (Romania)
Department of Automotive and Transportation, Faculty of Mechanical Engineering

Nov 2020 – Oct 2023 **Head of research centre**
R&D institute of "Transilvania" University of Brașov, Brașov (Romania)
Virtual Industrial Informatics and Robotics

Mar 2021 – present **Professor**
"Transilvania" University of Brașov, Brașov (Romania)

Digitization, Innovative Driver Assistance Technologies, Programming, Artificial Intelligence, Robotics, Human-Computer Interaction, Virtual Reality, Economy, Digital Cultural Heritage.

Oct 2018 – Feb 2021 **Assoc. Prof.**
"Transilvania" University of Brașov, Brașov (Romania)

Digitization, Innovative Driver Assistance Technologies, Programming, Artificial Intelligence, Robotics, Human-Computer Interaction, Virtual Reality, Economy, Digital Cultural Heritage.

Oct 2015 – Sep 2018 **Lector**
"Transilvania" University of Brașov, Brașov (Romania)
Digitization, Innovative Driver Assistance Technologies, Programming, Artificial Intelligence, Robotics, Human-Computer Interaction, Virtual Reality, Economy, Digital Cultural Heritage.

Oct 2012 – Sep 2015 **Researcher**
"Transilvania" University of Brașov, Brașov (Romania)
Artificial Intelligence, Robotics, Virtual Reality, Networks, Databases (MySQL).

May 2009 – Sep 2009 **Internship**
IIT - Istituto Italiano di Tecnologia, Genova (Italy)
Robotics, Video processing, Brain-Computer Interfaces (BCI).

Jun 2008 – Jul 2008 **Internship**
Raiffeisen Lujerului, Bucharest (Romania)
Finances, Banks, Operations

Jun 2006 – Aug 2006 **Internship**
SIVECO, Bucharest (Romania)
Linux, Networks.

Jun 2005 – Aug 2005 **Internship**
Transilvania Electric Company, Brașov (Romania)

Linux, Networks.

EDUCATION

Jul 2019   Habilitation with thesis "Innovative Automotive Technologies for Advanced Driver Assistance Systems (ADASs)"

University of Pitești, Faculty of Mechanical Engineering and Technology, Pitești (Romania)

Oct 2013 – Apr 2015   Postdoc with thesis " Car Assistant Based On Following The Driver's Eye-gaze Direction "

"Transilvania" University of Brașov, Faculty of Mechanical Engineering, Virtual Industrial Informatics and Robotics, Brașov (Romania)

Oct 2008 – Sep 2011   PhD with thesis "Learning mobile robots for movement and manipulation in industrial environments"

Transilvania" University of Brașov, Faculty of Product Design, Virtual Industrial Informatics and Robotics, Brașov (Romania)

Oct 2009 – May 2010   International Master in "Virtual Reality Technologies with Industrial Applications"

Scuola Superiore Sant'Anna, Pisa (Italy)

Oct 2008 – May 2010   Master in "Information and Communication Systems and Technologies"

Transilvania" University of Brașov, Faculty of Electrical Engineering and Computer Science, Department of Electronics and Communications, Brașov (Romania)

Oct 2005 – May 2008   Bachelor of Economic Sciences

Academy of Economic Studies, Faculty of Finance, Insurance, Banks and Stock Exchanges, Bucharest, Romania.

Oct 2003 – May 2008   Bachelor of Engineering

Politehnica University of Bucharest, Faculty of Automation and Computers, Computer Department, Bucharest, Romania.

PERSONAL COMPETENCES

| Main language | Romanian | | | | |

Foreign languages	Understanding		Conversation		Writing
	Listening	Reading	Participation	Oral discourse	
English	C2	C2	C2	C2	C2
French	B1	B1	B1	B1	B1
Italian	A2	A2	A1	A1	A1
German	A2	A2	A2	A2	A2

Informatic competences

- Programming languages:
  - C, C++ (intermediate)
  - Swift, Objective-C (beginner)
  - Java (intermediate)
  - PHP (advanced)
  - HTML / CSS (advanced)
  - Solidity (intermediate)
- Design and Simulation:
  - VRML, VREP, CATIA (advanced)
- Networking, Linux servers (intermediate)

Driving license

B

Additional information

Projects

- **EHERITAGE - http://eheritage.org/**
  EU funded research project worth 975,625 EUR – HORIZON2020 – **Coordinator**.
- **Awarding Horizon - http://eheritage.org/ro/**
  UEFISCDI funded research project worth 42,000 EUR – **Coordinator**.
- **NAVIEYES - http://navieyes.unitbv.ro/**
  Research project funded by the Ministry of National Education, no. 240 from 01/07/2014 (PN-II-PT- PCCA-2013-4-2023) – **Technical director**.
- **BRAINSPACE - http://brainspaceproject.org/**
  Research project funded by ROSA – **Scientific Manager**.
- **DILSimEV - http://www.dilsimev.ro/**
  Research project funded by the Ministry of National Education, PED 431 (PN-III-P2-2.1-PED-2019-4366) – Member.
- **ROBOCORE - http://www.cester.utcluj.ro/robocore/**
  Research project funded by the Ministry of National Education, no. 247 (PN-II-PT-PCCA-2013-4-0647) – Member.
- **SPINE - http://spine.unitbv.ro/**
  Research project funded by the Ministry of National Education, nr. 227 (PN-II-PT-PCCA-2013-4-1596) – Member.
- **PROROB - http://www.rrv.ro/prorob/**
  Research project funded by the Ministry of National Education, CNCSIS ID_775/2008 – Member.

Selection of publications

- **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
- **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
- **Duguleană, M.**, Briciu, V. A., Duduman, I. A., & Machidon, O. M. (2020). A Virtual Assistant for Natural Interactions in Museums. Sustainability, 12(17), 6958. DOI:

https://doi.org/10.3390/su12176958

- **Duguleană, M.**, & Gîrbacia, F. (2021, October). Augmented reality meets non-fungible tokens: Insights towards preserving property rights. In 2021 IEEE International Symposium on Mixed and Augmented Reality Adjunct (ISMAR-Adjunct) (pp. 359-361). IEEE.

- Machidon, O. M., **Duguleană, M.**; Carrozzino, M. (2018) Virtual humans in cultural heritage ICT applications: A review. Journal of Cultural Heritage. DOI: 10.1016/j.culher.2018.01.007

- Machidon, O. M., Tavčar, A., Gams, M., & **Duguleană, M.** (2020). CulturalERICA: A conversational agent improving the exploration of European cultural heritage. Journal of Cultural Heritage, 41, 152-165. DOI: 10.1016/j.culher.2019.07.010

- Butnariu, S., **Duguleană, M.**, Brondi, R., Gîrbacia, F., Postelnicu, C., & Carrozzino, M. (2018). An Interactive Haptic System for Experiencing Traditional Archery. Acta Polytechnica Hungarica, 15(5). DOI: https://dx.doi.org/10.12700/APH.15.5.2018.5.11

- Boboc, R. G., **Duguleană, M.**, Voinea, G. D., Postelnicu, C. C., Popovici, D. M., & Carrozzino, M. (2019). Mobile Augmented Reality for Cultural Heritage: Following the Footsteps of Ovid among Different Locations in Europe. Sustainability, 11(4), 1167. DOI: https://doi.org/10.3390/su11041167

- Voinea, G. D., Postelnicu, C. C., **Duguleana, M.**, Mogan, G. L., & Socianu, R. (2020). Driving performance and technology acceptance evaluation in real traffic of a smartphone-based driver assistance system. International journal of environmental research and public health, 17(19), 7098. DOI: https://doi.org/10.3390/ijerph17197098