

PERSONAL INFORMATION



László Rónai PhD

06-46/565-111/21-09

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Sex: male | Date of birth: 30. 05. 1991. | Nationality: Hungarian

WORKPLACE AND POSITION

head of department, associate professor

WORK EXPERIENCE

01/04/2024 –	head of department, associate professor University of Miskolc, Institute of Machine Tools and Mechatronics, Robert Bosch Department of Mechatronics
15/02/2021 – 31/03/2024	head of department, senior lecturer University of Miskolc, Institute of Machine Tools and Mechatronics, Robert Bosch Department of Mechatronics
01/10/2020 – 14/02/2021	senior lecturer University of Miskolc, Institute of Machine Tools and Mechatronics, Robert Bosch Department of Mechatronics
01/07/2020 – 30/09/2020	assistant lecturer University of Miskolc, Institute of Machine Tools and Mechatronics, Robert Bosch Department of Mechatronics
01/09/2016 – 30/06/2017	Research Assistant Research Institute of Applied Earth Sciences, Department of Research Instrumentation and Informatics
01/02/2016 – 31/08/2016	Teacher of Engineering University of Miskolc, Faculty of Mechanical Engineering and Informatics Robert Bosch Department of Mechatronics

EDUCATION AND TRAINING

2016 – 2020	PhD studies (doctorate with summa cum laude) University of Miskolc, Faculty of Mechanical Engineering and Informatics, István Sályi Doctoral School
2014 – 2016	Certified Mechatronics Engineer (Diploma with Honours Degree) University of Miskolc, Faculty of Mechanical Engineering and Informatics
2010 – 2014	Mechatronics Engineer BSc (Diploma with Honours Degree) University of Miskolc, Faculty of Mechanical Engineering and Informatics
2005 – 2010	General Certificate of Secondary Education Kandó Kálmán Technical School, Miskolc, Hungary

PERSONAL SKILLS

Mother tongue(s) Hungarian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
English language examination certificate (B2), combined, 2010					
German	B1	B1	B1	B1	B1
PhD Technical German language examination, 2019 German language examination certificate (B1), combined, 2018					

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
Common European Framework of Reference for Languages

Digital competence

SELF ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Independent user	Independent user	Independent user	Independent user	Independent user

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

Programming languages: C, C++, C# (basic level);
Office applications: Microsoft Office™;
Design and engineering software's: AutoCAD, Creo Parametric, AutoDesk Inventor; Eagle
Simulation software's: Scilab, Matlab;
PLC programming: CX Programmer/Designer, IndraLogic;
Robot programming: Fanuc Roboguide;
Microcontroller programming: CooCox, MPLAB X, Arduino IDE;
Data processing: LabVIEW.

Driving licence B category driving license

ADDITIONAL INFORMATION

Major publications

Rónai L.: Robotic check of a subassembly, and its simulation, SN APPLIED SCIENCES, 5:208, 2023
Rónai L., Lénárt J., Subert J.: Development of a Hydraulic Press Machine for Laboratory Measurements, Academic Journal of Manufacturing Engineering, Vol. 21., Issue 1, 2023.
Rónai L., Szabó T.: Snap-fit Assembly Process with Industrial Robot Including Force Feedback, Robotica, Cambridge University Press, 2020, pp. 317–336.
Rónai L., Szabó T.: Modeling and Robotic Handling of a Snap-Fitting Box Buckle, Pollack Periodica, Akadémiai kiadó, 2020, pp. 94 – 105.
Rónai L., Szabó T.: Application of Rexroth Controlling for Inverted Pendulum, IJEMS Vol. 4, No. 1., Debrecen, 2019
Rónai L., Füvesi V., Vörös Cs.: Designing of a Water Sampling Unit, 5th ISCAM Conference, Debrecen, 2017

Projects

2022 Participant of the TKP-17-1/PALY-2020 „Társadalmi hasznosság növelő fejlesztések a hazai felszín alatti természeti erőforrások hatékonyabb kiaknázása és hasznosítása területén” project.
2021 – 2022 Participant of the GINOP-2.2.1-15-2017-00093 SGT-C3D “Szerszámgép-, célgép-, és gyártóeszköz fejlesztés, valamint a kapcsolódó gyártási technológia kutatása a C3D Kft-nél” project
2018 – 2020 Participant of the EFOP-3.6.1-16-2016-00011, “Fiatalodó és megújuló Egyetem – Innovatív tudásváros” project
2016 – 2017 Participant of the UNEXMIN project, European Union's Horizon H2020, grant agreement No 690008
2016 – 2017 Feasibility study for welding battery cells with a robot, Research report. Made by the Robert Bosch Department of Mechatronics, University of Miskolc. Commissioned by the Robert Bosch Power Tool Ltd. Supervisor: Tamás Szabó PhD.
2012 – 2013 Participant of the TÁMOP-4.2.1.B-10/2/KONV-2010-0001 project

Honours and awards

2020 MAB DIPA Scientific award
2018 ÚNKP (Új Nemzeti Kiválóság Program) scholarship
2017 ÚNKP (Új Nemzeti Kiválóság Program) scholarship
2017 XXXIII. OTDK Conference, 3rd place
2016 Gold medallion for Studying Hard
EEMC'16 Conference: Best poster award
2015 TDK Conference 1st place
Scholarship of the Hungarian Republic

		Gold medallion for Studying Hard XXXII. OTDK Conference
	2014	TDK Conference 1st place Scholarship of the Hungarian Republic Gold medallion for Studying Hard
	2013	Scholarship of the Hungarian Republic Gold medallion for Studying Hard
	2012	TDK Conference 3rd place Bronze medallion for Studying Hard
	2011	Bronze medallion for Studying Hard TDK Conference
	2010	Kandó – award Kandó Kálmán Technical School, Miskolc, Hungary
Memberships	2022	Member of the MTA Committee on Mechanical Structures/Mechatronics Subcommittee
	2016	Member of the “MAB – Gépszerkezettani Munkabizottság”
	2014 – 2015	University of Miskolc: ESN-Erasmus Student Network membership
	2009 – 2019	MCSE- Hungarian Astronomical Association membership
	2007	Hungarian fishing-examination
Participation in courses and study trips	2019	ISK German language course B2 group, Salzburg, Austria, scholarship by OMAA, 3 weeks
	2019	20/05 – 24/05 Research study: University of Duisburg-Essen, Chair of Mechatronics, Germany, scholarship by Campus Mundi
	2018	EFOP Participation in a series of training for researcher recruitment EFOP-3.6.1-16-2016-00011
	2017	ABB robot controller course (Ref.no.:16211924#768)
	2015	MeMOOC online course – Certificate (E-000085/2014/D007)
	2015	Takata – Automotive Safety Course
	2014	FESTO – Basics of Pneumatics Course
	2009	Tellus – Professional Work Experience 19. 07.–07. 08., Plymouth, UK
Courses held	2023, 2024	FANUC/KUKA robot programming course for industry professionals and technicians.
	2023	Electrohydraulic course for industry professionals and technicians.
	2020	Rexroth PLC programming course for industry professionals.
	2018	Rexroth PLC programming course for industry professionals.
	2018	Fanuc robot programming course for industry professionals in basic and expert levels.
Competitions	2015	Engineers Competition – 6th place (National competition with 121 team), team leader
	2012	Participation in the 34th György Hajós National Mathematics Competition Pázmány Péter Catholic University, Budapest
	2011	Participation in the 33rd György Hajós National Mathematics Competition Eötvös József College of Baja
	2008	II. place in the team at the Bede Lajos Mathematical Memorial Competition
	2007	Participation in the English Teaching Resource Centre competition University of Miskolc