PERSONAL INFROMATION

László Rónai PhD

📞 06-46/565-111/21-09

✉ laszlo.ronai@uni-miskolc.hu

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

WORKPLACE AND POSITION

head of department, senior lecturer

2021 – University of Miskolc, Institute of Machine Tools and Mechatronics
Robert Bosch Department of Mechatronics

2020 –2021 assistant lecturer, University of Miskolc, Institute of Machine Tools and Mechatronics, Robert Bosch Department of Mechatronics

WORK EXPERIENCE

20/05/2019–24/05/2019 ### Research study
University of Duisburg-Essen, Chair of Mechatronics, Germany, scholarship by Campus Mundi

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 student
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.
(These competences were acquired in the Secondary school and the University.)

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., 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.: Design Aspects of a Robotic End-effector, Design of Machines and Structures, Vol. 8, No. 2 pp. 52-58., 7 p., 2019

Rónai L., Szabó T.: Application of Rexroth Controlling for Inverted Pendulum, IJEMS Vol. 4, No. 1., Debrecen, 2019

Rónai L., Szabó T.: Designing of Robotic Double-function Fingertips, Design of Machines and Structures, Vol. 7, No. 2 pp. 13-19., 7 p., 2018

Rónai L., Füvesi V., Vörös Cs.: Designing of a Water Sampling Unit, 5th ISCAME Conference, Debrecen, 2017

Rónai L., Szabó T.: Kinematical investigation and regulation of a 4DOF model robot, Acta Mechanica Slovaca Vol. 20, No. 3., ISSN 1335-2393, 2016

Projects

2021 – 2023	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 Engineers Competition – 6th place (National competition with 121 team), team leader 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
Memberships	2014 – 2015	University of Miskolc: ESN-Erasmus Student Network membership
	2009 –	MCSE- Hungarian Astronomical Association membership
	2007	Hungarian fishing-examination
Courses	2019	ISK German language course B2 group, Salzburg, Austria, scholarship by OMAA, 3 weeks
	2018	EFOP Participation in a series of training for researcher recruitment
	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	Robot programming course for industry professionals
	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