

INFORMAȚII PERSONALE

Crețescu (Raț) Nadia Ramona

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EXPERIENȚA PROFESIONALĂ

2023-prezent

Conferențiar la facultatea Design de Prods și Mediu

Universitatea Transilvania din Brasov, B-dul Eroilor nr. 29, 500036 Brașov, România,

Web: www.unitbv.ro

- Pregătirea și predarea cursurilor și a laboratoarelor;
- Întocmirea temelor de proiect și urmărirea dezvoltării acestora de către studenți;
- Evaluarea studenților;
- Implicarea în procesul de admitere.

Tipul sau sectorul de activitate Educație

2014-2023

Șef lucrări la facultatea Design de Prods și Mediu

Universitatea Transilvania din Brasov, B-dul Eroilor nr. 29, 500036 Brașov, România,

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- Pregătirea și predarea cursurilor și a laboratoarelor;
- Întocmirea temelor de proiect și urmărirea dezvoltării acestora de către studenți;
- Evaluarea studenților;
- Implicarea în procesul de admitere.

Tipul sau sectorul de activitate Educație

2002-2014

Preparator la facultatea Design de Prods și Mediu

Universitatea Transilvania din Brasov, B-dul Eroilor nr. 29, 500036 Brașov, România,

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- Pregătirea și predarea laboratoarelor;
- Întocmirea temelor de proiect și urmărirea dezvoltării acestora de către studenți;
- Evaluarea studenților;
- Implicarea în procesul de admitere.

Tipul sau sectorul de activitate Educație

EDUCAȚIE ȘI FORMARE

- 2003-2011 Diplomă de Doctor în domeniul Inginerie Mecanică**
Universitatea Transilvania din Brașov, România.
- Principalele abilități acumulate: redactarea de lucrări științifice; analiza și sinteza cercetărilor în domeniu.
- 2002-2003 Diplomă de Studii Aprofundate în domeniul Robotică**
Universitatea Transilvania din Brașov, România.
- 1997-2002 Diplomă de Inginer Diplomat (secția Roboți Industriali)**
Universitatea Transilvania din Brașov, România.
- 1993-1997 Diplomă de Bacalaureat**
Liceul Grigore Moisil, Brașov, România.

COMPETENTE PERSONALE

Limba(i) maternă(e) Română

Alte limbi străine cunoscute

	INTELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	
Franceză	B2	B2	B2	B2	B1
Engleză	B2	B1	B1	B1	B1

Competențe de comunicare

- bune competențe de comunicare dobândite prin experiența de predare;
- excelente abilități de interacțiune cu studenții, dobândite prin activitatea de predare interactivă.

Competențe dobândite la locul de muncă

- o bună capacitate de adaptare, comunicare, autodezvoltare personală și creativitate (obținute în urma activităților de cercetare și predare)

Competențe informatice

- o bună cunoaștere a instrumentelor Microsoft Office™, precum și a programelor ingineresti precum ADAMS, CATIA, Etc.

INFORMATII SUPLIMENTARE

Publicații relevante

1. **Crețescu, N.**, Neagoe, M., Saulescu, R. Dynamic Analysis of a Delta Parallel Robot with Flexible Links and Joint Clearances. *Applied Sciences*. 2023; 13(11):6693. <https://doi.org/10.3390/app13116693>. FI: 2.838, SRI: 0.885, ISSN: 2076-3417.
2. Neagoe, M., Saulescu, R., Jaliu, C., Munteanu, O., **Crețescu, N.** A Comparative Performance Analysis of Four Wind Turbines with Counter-Rotating Electric Generators. *Applied Sciences* 2022, 12(19):4233, p. 1-24, <https://doi.org/10.3390/app12094233> (FI: 2.838, Q2 - ENGINEERING, MULTIDISCIPLINARY, SRI: 0.885, WOS: 000794733500001).
3. Neagoe, M., Saulescu, R., Jaliu, C., **Crețescu, N.** Steady-State Modeling and Simulation of a 1-DOF Dual-Input and Dual-Output Planetary Speed Increaser for Counter-Rotating Wind Turbines. *Proceedings of the 2nd Symposium on Mechanical Systems and Robotics*, May 19-21, 2022 Rapid City, South Dakota, USA, in Larochelle, P., McCarthy, M. (ed.), *Proceedings of the 2022 USCToMM Symposium on Mechanical Systems and Robotics, Mechanisms and Machine Science* Vol. 118, Springer Nature Switzerland AG 2022, ISSN 2211-0984, ISSN 2211-0992 (electronic), ISBN 978-3-030-99825-7, ISBN 978-3-030-99826-4(eBook), DOI 10.1007/978-3-030-99826-4_3, pp. 20-31.
4. Saulescu, R., Neagoe, M., **Crețescu, N.** Comparative Analysis of Two Wind Turbines with Counter-Rotating vs. Fixed-Stator Electric Generator, 9th International Conference on Advanced Concepts in Mechanical Engineering, ACME 2020, Iasi, Romania, 4-5 June 2020, IOP Conference Series: Materials Science and Engineering, Volume 444, Issue 5, 052007, pp. 1-12, 29 November 2018, ISSN: 17578981, DOI: 10.1088/1757-899X/444/5/052007.
5. Neagoe, M., Burduhos, B., Mohammadi, F., **Crețescu, N.** A Comparative Analysis of the Solar Energy Receiving Share Using Four Tracking System Types at Mid-Latitude Regions, In: Visa, I. and Duta, A. (eds.), *Solar Energy Conversion in Communities*, Springer Proceedings in Energy, Springer Nature Switzerland AG 2020, Chapter 7, p. 93-110, DOI: 10.1007/978-3-030-55757-7_7, ISSN 2352-2534, ISBN 978-3-030-55756-0, The 6th Conference on Sustainable Energy, CSE2020, 22-24 October 2020, Brasov, Romania.
6. Burduhos, B., Visa, I., Neagoe, M., Devetakovic, M., **Crețescu, N.** Comparative Analysis of Software Accuracy in Photovoltaic Energy Estimation for a Temperate Mountain Climate, In: Visa, I. and Duta, A. (eds.), *Solar Energy Conversion in Communities*, Springer Proceedings in Energy, Springer Nature Switzerland AG 2020, Chapter 9, p. 125-139, DOI: 10.1007/978-3-030-55757-7_9, ISSN 2352-2534, ISBN 978-3-030-55756-0, The 6th Conference on Sustainable Energy, CSE2020, 22-24 October 2020, Brasov, Romania.
7. Neagoe, M., Saulescu, R., Jaliu, C., **Crețescu, N.** Efficiency Analysis of a Planetary Speed Increaser for Wind Turbines with Counter-Rotating Versus Fixed-Stator Electric Generator, 2020 7th International Conference on Energy Efficiency and Agricultural Engineering (EE&AE), Ruse, 2020, pp. 1-4, doi: 10.1109/EEAE49144.2020.9279068, <https://ieeexplore.ieee.org/document/9279068/authors#authors>
8. **Crețescu, N.**, Neagoe, M. Dynamic Modelling of an Isoglide T3 Type Parallel Robot. In: Lovasz, EC., Maniu, I., Doroftei I., Ivanescu, M., Gruescu, C.M. (eds) *New Advances in Mechanisms, Mechanical Transmissions and Robotics*. Joint International Conference of the International Conference on Mechanisms and Mechanical Transmissions and the International Conference on Robotics, MTM&Robotics 2020, 14-16 October 2020, Timișoara, Romania. *Mechanisms and Machine Science*, Vol. 88, 2021. Springer, Cham, p. 235-248, DOI: 10.1007/978-3-030-60076-1_21, ISBN 978-3-030-60075-4.
9. Burduhos, B., Visa, I., Neagoe, M., **Crețescu, N.** Simulated vs. produced electrical energy of a 9.6 kWp PV system installed in a mountain temperate climate, *Journal of Science and Arts*, No. 1(50), pp. 215-224, 2020, ISSN2068-3049, http://www.josa.ro/docs/josa_2020_1/c_03_Burduhos_215-224_10p.pdf
10. Neagoe, M., Visa, I., Duta, A., **Crețescu, N.** A New Approach on the Protection Against Overheating of Flat Plate Solar-Thermal Collectors, *Proceedings of the Conference for Sustainable Energy (CSE) 2017*, Brasov, 19-21 October 2017, *Nearly Zero Energy Communities*, Editors Ion Visa and Anca Duta, Ed. Springer, pp. 283-295, ISBN 978-3-319-63214-8, Springer Proceedings in Energy, DOI 10.1007/978-3-319-63215-5_21.
11. **Crețescu, N.**, Neagoe, M., Saulescu, R. Kinematic and Dynamic Analysis of a 4DOF Parallel Robot with Flexible Links, *Proceedings of The Joint International Conference of the XII International Conference on Mechanisms and Mechanical Transmissions (MTM) and the XXIII International Conference on Robotics (Robotics '16)*, Aachen, 26-27 October 2016, *New Advances in Mechanisms, Mechanical Transmissions and Robotics*, Editors Burkhard Corves, Erwin-Christian

- Lovasz, Mathias Husing, Inocentiu Maniu, Corina Gruescu, Ed. Springer, pp. 473-481, ISBN 978-3-319-45449-8, Mechanisms and Machine Science 46, DOI 10.1007/978-3-319-45450-4_48 (ISI Proceedings).
12. **Crețescu, N. R.**, Kinematic and Dynamic Simulation of a 3DOF Parallel Robot, BULLETIN OF THE TRANSILVANIA UNIVERSITY OF BRASOV • VOL. 8 (57) No.1 – 2015, SERIES I - ENGINEERING SCIENCES, ISSN 2065-2119 (Print), ISSN 2065-2127 (CD-ROM), pp. 73-78.
 13. **Crețescu, N.**, Neagoe, M. Rigid versus flexible link dynamic analysis of a 3DOF Delta type parallel manipulator, Applied Mechanics and Materials, Vol. 762 (2015) pp 101-106, Trans Tech Publications, Switzerland, ISBN-13: 978-3-03835-444-4, online: <http://www.scientific.net>.
 14. Neagoe M., **Crețescu N.**, Săulescu R., Dynamic modelling of a 3DOF medical parallel robot with one decoupled motion. Jurnal: Advanced Materials Research Vols. 837 (2014) pp 594-599, Trans Tech Publications, Switzerland, doi: 10.4028/www.scientific.net/AMR.837.594.
 15. **Crețescu N.**, Neagoe M., Săulescu R., Kinematic modelling and VR simulation of a 3DOF medical parallel robot with one decoupled motion. Jurnal: Advanced Materials Research Vols. 837 (2014) pp 567-572, Trans Tech Publications, Switzerland, doi: 10.4028/www.scientific.net/AMR.837.567.
 16. Neagoe, M., Visa, I., **Crețescu, N.**, Moldovan, M. On a New Parallel Tracking System for Accurate Orientation of Concentrated Solar Convertors, Applied Mechanics and Materials Vol. 658 (2014) pp 105-110, Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/AMM.658.105.
 17. Săulescu, R., Munteanu, O., Neagoe, M., **Crețescu, N.**, On the eccentricity effects in solar tracking triangular linkage with linear actuator, The 11th IFTOMM International Symposium on Science of Mechanisms and Machines-SYROM 2013, Braşov, 11-12 November 2013 (ISI Proceedings).
 18. **Rat, N.R.**, Neagoe, M., Diaconescu, D., Stan, S.D. Dynamic simulations regarding the influence of the load-rigidity correlation on the working accuracy of a medical Triglide parallel robot, ISSN 1392 - 1207. MECHANIKA. 2011. 17(2): 178-181. Print ISSN: 1392-1207 . Online ISSN: 2029-6983. <http://dx.doi.org/10.5755/j01.mech.17.2.336>.
 19. Neagoe, M., Diaconescu, D., Jaliu, C., Stan, S.D., **Crețescu, N.**, Săulescu, R. On the Accuracy of a Stewart Platform: Modelling and Experimental validation. Published: Computational intelligence and modern heuristics, In-Tech, Olajnica, Croatia, 2010, cap. 6, pp.75-98, ISBN 978-953-7619-28-2.
 20. **Rat, N.R.**, Neagoe, M., Diaconescu, D., Stan, S.D., Bălan, R. Dynamic modeling and VR Simulation of 3DOF medical parallel robots, Chapter in *Technological Developments in Education and Automation*, pp. 297-302, Magued Iskander, Vikram Kapila and Mohammad A. Karim (Ed.), Springer Netherlands Pub. ISBN 978-90-481-3655-1 (Print) 978-90-481-3656-8 (Online), 2010, DOI: 10.1007/978-90-481-3656-8_55.
 21. **Rat, N. R.**, Neagoe, M. „Rigid vs. flexible links dynamic analysis of a 3DOF parallel robot”. Proceedings of the 3rd IEEE International Conference on ASME 2009, DEST '09, 1-3 June 2009, Istanbul, Turkey, p. 534-539, ISBN: 978-1-4244-2345-3. Digital Ecosystems and Technologies, 2009, DOI: 10.1109/DEST.2009.5276749.
 22. **Rat, N. R.**, Neagoe, M., Gogu, G., Stan, S. D. „Dynamic analysis of an Isoglide3-T3 parallel robot”. Annals of DAAAM 2009 & Proceedings of the 20th International DAAAM Symposium. Intelligent Manufacturing & Automation: Theory, Practice & Education, 25-28th November 2009, Vienna, Austria, pp. 15, ISSN 1726-9679, ISBN 978-3-901509-70-4 (ISI Proceedings).
 23. **Rat, N.**, Neagoe, M., Gogu, G., „Theoretical and experimental research on the dynamics of a 4 DOF Isoglide4-T3R1 parallel robot”, SYROM2009. ISBN: 978-90-481-3521-9 e-ISBN: 978-90-481-3522-6, DOI 10.1007/978-90-481-3522-6, Springer Heidelberg Dordrecht London New York.
 24. Stan, S. D., Maties, V., Balan, R., Gogu, G., **Rat, N. R.**, „Trajectory planning and simulation of Isoglide3 parallel robot”. Annals of DAAAM 2009 & Proceedings of the 20th International DAAAM Symposium. Intelligent Manufacturing & Automation: Theory, Practice & Education, 25-28th November 2009, Vienna, Austria, pp. 227, ISSN 1726-9679, ISBN 978-3-901509-70-4 (ISI Proceedings).