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Position

Professor of Artificial Intelligence, Technical University of Cluj-Napoca	since 2020
Assoc. Prof., Technical University of Cluj-Napoca	2014 –2020
Senior lecturer, Technical University of Cluj-Napoca	2009–2014
Lecturer, Technical University of Cluj-Napoca	2006–2009
Junior lecturer, Technical University of Cluj-Napoca	2004–2006

Teaching experience

Artificial Intelligence (2013-2024),
Intelligent Systems (2014-2024),
Knowledge Based Systems (2008-2024),
Functional Programming, (2003-2016)

Knowledge transfer on artificial intelligence

Invited lecture on "Brave new world: AI in teaching and learning", Int. Symposium on Universal Language of Arts and Science", UT HUB, (2024)

Panellist on , Int. Symposium on Universal Language of Arts and Science", UT HUB, (2024)

Task leader in the Accelerate project of the European University of Technology alliance on "Research Strategy" (2024)

Member in the Technical Committee for Standardisation ASRO CT 401 Artificial Intelligence (2024)

Invited lecture on "AI in Software Engineering" at King Danylo University, Ivano-Frankivsk, Ukraine (2024)

Awarded by students from the Computer Science Department as "decan de suflet" (2024, 2014)

Best presentation at the 4th Int. Conf. on Artificial Intelligence in Education Technology (AIET2023), Berlin, Germany, Springer, with the paper "Teaching first order logic with friendly puzzles" (2023)

Published book on teaching artificial intelligence: Modelling Puzzles in First Order Logic, Springer, DOI: 10.1007/978-3-030-62547-4, Source code is available at <https://users.utcluj.ro/~agroza/puzzles/maloga/codes.html> (2021)

Developing an education system for personalised ophthalmology residency training. The AI-based systems matches patients with the resident who would most benefit from the specific case, based on their case history and performance. The system is described in "Artificial Intelligence for Personalised Ophthalmology Residency Training", Journal of Clinical Medicine Vol. 12, Iss. 5, DOI: 10.3390/jcm12051825, 2023. The system is currently used by medical residents as a pilot in the Emergency County Hospital, Ophthalmology Department in Cluj-Napoca (2023)

Invited talk at Progress and Innovation in Ophthalmology, 7-9 December 2023, Cluj-Napoca, Romania on the topic of applying AI to ophthalmology. Presentation title: "Eyes on AI"

Invited talk at Targul IMM-IT & Industrii 4.0, 22-24 November, Cluj-Napoca. Presentation title: "Brave new world: AI is more than ML"

Knowledge transfer on AI to DORIE S.R.L under the Transylvania Digital Innovation Hub matching program

Raising awareness on the risks of AI. The art installation called "The Profile" aims to raise awareness about the power of deepfakes, build new technology, understand human behaviour, and present a fresh perspective on intertwining art and AI. The installation is described in "The profile: unleashing your deepfake self", Cheres, Ioana and Groza, Adrian, Multimedia Tools and Applications Springer Nature, vol. 82. 3183931854, DOI: <https://doi.org/10.1007/s11042-023-14568-x>. The installation was presented at an "AI and Art" exposition in Cluj-Napoca (2022)

Analysing how Large Language Models are used in teaching and learning. The results of the study were presented at the 16th Int. Conf. of Education, Research and Innovation (ICERI23), Seville, Spain. The paper is available at "Brave new world: AI in teaching and learning" (2023)

Panellist on "Innovation in Romania through AI", Public discussion on the Romanian Strategy on AI, Bucuresti, Romania, 26 September, (2023)

Guest member in the European Digital Education Hub (2023)

Member in the "Romanian Scientific and Ethics Council in Artificial Intelligence" (2023)

Member in the Romanian working group "Education and AI Council" (2023)

Working on the challenge "Accelerating digital innovation with the help of data spaces", Transilvania DIH, Cluj Innovation Camp 2023: 13-15th of October 2023

Contributor as technology expert to the National Strategic Framework for Artificial Intelligence
<https://strategie-ia.utcluj.ro/>

Responsible for the report "Analysing regulation on Artificial Intelligence" for the Romanian Agency of Digitalisation. The report is available at <https://strategie-ia.utcluj.ro> and it has been used to support public policies on AI. Parts of the report have been included in the "National Strategic Framework for Artificial Intelligence"

Presenting "Regulation Sandboxes for Artificial Intelligence" to stakeholders from central administration, Bucuresti, 8 December (2022)

Invited talk "Artificial Intelligence for Age-Related Macular Degeneration", Iuliu Hatieganu University of Medicine and Pharmacy, Cluj-Napoca, Romania, 5 December, 2022

Panelist on "Regulating Artificial Intelligence" Romanian AI Days, Oradea, Romania, 12-13 October, 2022

Presenting "AI tools for public administration" to stakeholders from local public administration, Cluj-Napoca, 5 April (2022)

Presenting the ongoing research on AI to companies from the North-West Region in Romania, Transilvania Digital Innovation Hub, Cluj-Napoca, Romania, 24 November, 2022

Invited talk on "Artificial Intelligence in Ophthalmology", RePatriot, Artificial Intelligence in Health-care, 21 November, (2022)

Panelist on "Emerging Policies for AI", Romanian AI days, RePatriot, 23 November, 2021

PhD. supervisor since 2019 - 7 PhD. candidates.

Supervising 26 master students in AI (<https://users.utcluj.ro/~agroza/students/index.php>)

Supervising 97 diploma thesis in AI (<https://users.utcluj.ro/~agroza/students/index.php>)

Teaching Artificial Intelligence at Technical University of Kosice and Slovak Academy of Science (Kosice) - 2 weeks Erasmus mobility grant (May 2018)

Teaching Artificial Intelligence at Engineering Summer University, Cluj-Napoca, Cluj-Napoca, Romania, 15-19 July 2018. I had lectures on Semantic Web and Epistemic Games (2018).

Awarded by students from the Computer Science Department, TUCN as "decan de suflet" (2013)

Education

Phd. in Computer Science - *Magna Cum Laude*, Technical University of Cluj-Napoca, 2008 (Thesis title: "Structural Models for Inter-agents Online Dispute Resolution").

Postgraduate Studies "New Generation of Computers", Technical University of Cluj-Napoca, 2004

B.S. Computers, Technical University of Cluj-Napoca, 2003

Membership

Scientific and Ethics Council of Artificial Intelligence	since 2023
ACM	since 2022
International Association for Artificial Intelligence and Law	since 2012
Computer Science Teacher Association @ ACM	since 2011
ROCHI @ ACM	since 2004

Principal investigator

Position	Director (2024-2026)
Project	Implementation of Distributed Ledger Technologies in internal organizational workflows and support applications for cooperation between institutions in the field of national security.
Beneficiary	Ministry of Education
Webpage	
Position	UTCN Responsable (2022-2024)
Project	New Optical Coherence Tomography Biomarkers Identified with Deep Learning for Risk Stratification of Patients with Age-related Macular Degeneration PED616
Beneficiary	Ministry of Education
Webpage	http://users.utcluj.ro/~agroza/projects/delarmad
Position	Director (2016)
Project	Increasing understanding on climate change through public discourse analyse and stakeholders modelling, EEA Grant Romania-Norway
Beneficiary	Ministry of European Funds
Webpage	http://users.utcluj.ro/~agroza/projects/argclime

Position	Director (2013-2014)
Project	LELA: Collaborative Recommendation System in the Tourism Domain Using Semantic Web Technologies and Text Analysis in Romanian Language, Dec 2013-Mai 2014, PN-II-CI, UEFSCDI
Beneficiary	Recognos SRL Romania
Webpage	http://users.utcluj.ro/~agroza/projects/lela
Position	Director (2013-2014)
Project	GREEN-VANETS: Improving transportation using Car-2-X communication and multi agent systems, Oct 2013- Sep 2014
Beneficiary	Technical University of Cluj-Napoca, Romania
Webpage	http://users.utcluj.ro/~agroza/projects/vanets
Position	Director (2013-2015)
Project	ARGSAFE- Using Argumentation for justifying safeness in complex technical systems, Romania-Argentina Bilateral Contract, July 2013-June 2015.
Beneficiary	UEFSCDI
Webpage	http://users.utcluj.ro/~agroza/projects/argsafe
Position	Director (2012-2014)
Project	ASDEC - Structural Argumentation for Decision Support with Normative Constraints, Romania - Republic of Moldova Bilateral Contract, Mai 2013-Dec 2014.
Beneficiary	UEFSCDI
Webpage	http://users.utcluj.ro/~agroza/projects/asdec
Position	Postdoc (2010–2013)
Project	”EXCEL: Postdoctoral Programs for Knowledge Driven Society”, research theme: Structured Argumentation in Semantic Web Oriented E-Business
Beneficiary	POSDRU/89/1.5/S/62557 Romanian Ministry of Education and Research
Position	Director (2007-2008)
Project	”Automating Online Dispute Resolution for B2B Using Multi-Agent Systems”
Beneficiary	CNCIS, TD534/2007 of the Romanian Ministry of Education and Research

Researcher

Position	Task Leader (2024-2026)
Project	”ACCELERATE”
Beneficiary	EUT+
Webpage	
Position	Technology expert (2021-2023)
Project	”EXTRAS”
Beneficiary	EUT+
Webpage	
Position	Technology expert (2021-2023)
Project	”Cadru strategic pentru adoptarea i utilizarea de tehnologii inovative n administraia public 2021 – 2027 – soluii pentru eficientizarea activitii, cod SIPOCA 704”
Beneficiary	Autoritatea pentru Digitalizarea Romniei
Webpage	https://strategie-ia.utcluj.ro/

Position Technology expert (2021-2022)
 Project "Practica Avansata pentru succesul n cariera INGINereasca - PAVING, cod SMIS:130354"
 Beneficiary Universitatea Tehnica din Cluj-Napoca
 Webpage <https://ctfs.utcluj.ro/index.php/anunturi/finalizarea-implementarii-proiectului-practica-avansata-pentru-succesul-in-cariera-html>

Position Research Assistant (2005-2007)
 Project "Collaborative/Competitive Multi-Agent System Oriented on E-Business"
 Beneficiary CNCIS, Romanian Ministry of Education and Research

Position Research Assistant (2003-2004)
 Project "Software Agents for Processing the Semantic Web"
 Beneficiary CNCIS, Romanian Ministry of Education and Research

Research Assistant
 Technical University of Cluj-Napoca
 Collaborative/Competitive Multi-Agent System Oriented on E-Business, 2005-2007

Director: Ioan Alfred Letia
2005-2007

PC Chair

MIKE 2018, Cluj-Napoca, Romania, December 2018
 1st CFAUAS, Cluj-Napoca, Romania, September 2013
 2nd CFAUAS, Chisinau, Republic of Moldova, 23 October 2014

PC Member/Reviewer

Journals (reviewer): Information Technology Research J., Argument&Computation, Expert Systems with Applications,
 2024: CAiSE, AIET, ICCP
 2023: CAiSE, xAI, KSEM, ISM, GNAC, ICCP
 2022: IDC, ACIIDS
 2021: ICCP
 2020: WASA 2020 Workshop on Applications of Software Agents INISTA 2020 (Novi Sad, Serbia)
 2019: MIKE (Sri City, India) ICCP, (Cluj-Napoca, RO), WASA, BCI (Sofia, Bulgaria)
 2017: ICCP, (Cluj-Napoca, RO)
 2016: ICCP, (Cluj-Napoca, RO), ICDT (Lisbon, Portugal), INISTA (Sinaia, RO)
 2015: ICCP, (Cluj-Napoca, RO), BCI (Craioava, Romania), WASA (Craioava, Romania),
 2014: ICCP, (Cluj-Napoca, RO), WBC (Lisbon, PO), WASA (Thessaloniki, GR), MEI (LV, USA)
 2013: ICCP, (Cluj-Napoca, RO), CT (Prague, Czech), ICDT (Venice, Italy), ICASCE (Jakarta)
 2012: SSW, (Barcelona, Spain), ICCP, (Cluj-Napoca, Romania), MCCSIS, (Lisbon, Portugal)
 2011: ICCP, (Cluj-Napoca, Romania)
 2010: ICCT (Freiburg, Germany), ICCP (Cluj-Napoca, Romania)
 2009: NDT (Ostrava, Cehia), ICCP (Cluj-Napoca, Romania), ICADIWT (London, UK),
 2008: ROCHI (Iasi, Romania)

Proceedings Editor

Groza, Adrian, and Rajendra Prasath, eds. Mining Intelligence and Knowledge Exploration: 6th International Conference, MIKE 2018, Cluj-Napoca, Romania, December 20–22, 2018, Proceedings. Vol. 11308. Springer, 2018.

Books

A. Groza. Modelling Puzzles in First Order Logics. DOI 10.1007/978-3-030-62547-4, ISBN 978-3-030-62547-4, Springer, 2021, (accompanying website)

A. Groza. Artificial Intelligence. Exercises. U.T. Press, 2019, ISBN 978-606-737-374-5

A. Groza, R.R. Slavescu, A. Marginean. Introduction to Artificial Intelligence, U.T. Press, 2019, ISBN 978-606-737-290-8

A. Groza. Ontology Engineering with RacerPro - An Activity Based Approach, U.T. Press, 2014, ISBN 978-973-662-991-4

ISI Journals

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References

- [1] George Adrian Muntean, Adrian Groza, Anca Marginean, Radu Razvan Slavescu, Miheana Gabriel Steiu, Valentin Muntean, and Simona Delia Nicoara. Artificial intelligence for personalised ophthalmology residency training. *Journal of Clinical Medicine*, 12(5), 2023.
- [2] Ioana Cheres and Adrian Groza. The profile: unleashing your deepfake self. *Multimedia Tools and Applications*, pages 1–16, 2023.
- [3] G.A. Muntean, A. Marginean, A. Groza, I. Damian, Roman S.A., M.C. Hapca, M.V. Muntean, and S.D. Nicoar. The predictive capabilities of artificial intelligence-based oct analysis for age-related macular degeneration progression: a systematic review. *Diagnostics*, 13(14), 2023.
- [4] Beatrice-Andreea Marginean, Adrian Groza, George Muntean, and Simona Delia Nicoara. Predicting visual acuity in patients treated for amd. *Diagnostics*, 12(6):1504, 2022.
- [5] Sergiu Bilc, Adrian Groza, George Muntean, and Simona Delia Nicoara. Interleaving automatic segmentation and expert opinion for retinal conditions. *Diagnostics*, 12(1):22, 2021.
- [6] Anca Nicoleta Marginean, Delia Doris Muntean, George Adrian Muntean, Adelina Priscu, Adrian Groza, Radu Razvan Slavescu, Calin Lucian Timbus, Gabriel Zeno Munteanu, Cezar Octavian Morosan, Maria Margareta Cosnarovici, et al. Reliable learning with pde-based cnns and densenets for detecting covid-19, pneumonia, and tuberculosis from chest x-ray images. *Mathematics*, 9(4):434, 2021.
- [7] Adrian Groza, Liana Todorean, George Adrian Muntean, and Simona Delia Nicoara. Agents that argue and explain classifications of retinal conditions. *Journal of Medical and Biological Engineering*, 41(5):730–741, 2021.
- [8] Cristina Nica, Victor-Petru Almășan, and Adrian Groza. Fastcrs-seq: An efficient approach for extracting hierarchies of multilevel closed partially-ordered patterns. *Knowledge-Based Systems*, 210:106533, 2020.
- [9] Adrian Groza, Pinar Ozturk, Radu Razvan Slavescu, and Anca Marginean. Climate change opinions in online debate sites. *Computer Science and Information Systems*, 17(1):93–116, 2020.
- [10] Ștefan Conțiu and Adrian Groza. Improving remote sensing crop classification by argumentation-based conflict resolution in ensemble learning. *Expert Systems with Applications*, 64:269–286, 2016.

- [11] Sergio Alejandro Gomez, Anca Goron, Adrian Groza, and Ioan Alfred Letia. Assuring safety in air traffic control systems with argumentation and model checking. *Expert Systems with Applications*, 44:367 – 385, 2016.
- [12] Ioan Alfred Letia and Adrian Groza. Compliance checking of integrated business processes. *Data & Knowledge Engineering*, 87(0):1 – 18, 2013.
- [13] Ioan Alfred Letia and Adrian Groza. Argumentative support for structured HACCP plans. *Advances in Electrical and Computer Engineering*, 10(2):115–120, 2010.
- [14] Ioan Alfred Letia and Adrian Groza. Modelling imprecise arguments in description logic. *Advances in Electrical and Computer Engineering*, 9(3):94–99, 2009.