Adrian Petru Groza

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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 (2013-2023), Intelligent Systems (2014-2023),

Knowledge Based Systems (2008-2023),

Functional Programming, (2003-2016)

Knowledge transfer on artificial intelligence

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, Ophalmology Department in Cluj-Napoca (2023)

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 will be presented on 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)

Panelist 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)

Invited to "Tema zilei" radio program at Radio Cluj on the topic of Artificial Intelligence (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/

Responsable 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 Healthcare, 21 November, (2022)

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

PhD. superviser 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 Best Teacher (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 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 Seman-

tic 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 Con-

straints, 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 CNCSIS, TD534/2007 of the Romanian Ministry of Education and Research

Researcher

Position Technology expert (2021-2023)

Project "EXTRAS" Beneficiary EUT+

Webpage

Position Technology expert (2021-2023)

Project "Cadru strategic pentru adoptarea i utilizarea de tehnologii inova-

tive 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 "Practic Avansat pentru succesul n cariera INGinereasc -

PAVING, cod SMIS:130354"

Beneficiary Universitatea Tehnic din Cluj-Napoca

Webpage https://ctfs.utcluj.ro/index.php/anunturi/

 $\verb|finalizarea-implementarii-proiectului-practica-avan sata-pentru-succesul-in-cariera-avan sata-pentru-succesul-in-carie$

html

Position Research Assistant (2005-2007)

Project "Collaborative/Competitive Multi-Agent System Oriented on E-Business"

Beneficiary CNCSIS, Romanian Ministry of Education and Research

Position Research Assistant (2003-2004)

Project "Software Agents for Processing the Semantic Web" Beneficiary CNCSIS, Romanian Ministry of Education and Research

Research Assistant Director: Ioan Alfred Letia Technical University of Cluj-Napoca 2005-2007

Collaborative/Competitive Multi-Agent System Oriented on E-Business, 2005-2007

PC Chair

MIKE 2018, Cluj-Napoca, Romania, December 2018

 1^{st} 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,

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 (Craiova, 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 Racer Pro - 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, Mihnea 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 agerelated macular degeneration progressiona 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 Morosanu, 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 Toderean, 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 Almăşan, and Adrian Groza. Fastrca-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] Ştefan Conţiu 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 Leţia and Adrian Groza. Argumentative support for structured HACCP plans. Advances in Electrical and Computer Engineering, 10(2):115–120, 2010.
- [14] Ioan Alfred Leția and Adrian Groza. Modelling imprecise arguments in description logic. Advances in Electrical and Computer Engineering, 9(3):94–99, 2009.

BDI Conferences/Journals

References

- [1] Dan Lupu, Groza Adrian, and Adam Pease. Cross-validation of answers with sumo and gpt. In *Knowledge Base Construction from Pre-Trained Language Models*, Workshop @ 22nd International Semantic Web Conference (ISWC 2023).
- [2] Mircea Serban Vasiliniuc and Adrian Groza. Case study: Using ai-assisted code generation in mobile teams. ICCP'23.
- [3] Adrian Groza and Anca Marginean. Brave new world: Ai in teaching and learning. In 16th annual International Conference of Education, Research and Innovation, ICERI23.
- [4] Patricia Mateiu and Adrian Groza. Ontology engineering with large language models. In 25th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, SYNASC23.
- [5] Stefan Morar, Adrian Groza, and Mihai Pomarlan. Formalising natural language quantifiers for human-robot interactions. In 9th International Workshop on Artificial Intelligence and Cognition, AIC23.
- [6] Eugen Popescu, Adrian Groza, and Damian Ioana. Detecting diabetic retinopathy through fundus images using an ensemble of classifiers. In 11th International Conference on Advanced Technologies, ICAT23.
- [7] Adrian Groza. Teaching first order logic with friendly puzzles. In *The 4th International Conference on Artificial Intelligence in Education Technology*, AIET2023.

- [8] Raluca Brehar, Adrian Groza, Ioana Damian, George Muntean, and Simona Delia Nicoară. Age-related macular degeneration biomarker segmentation from oct images. In 2023 24th International Conference on Control Systems and Computer Science (CSCS), pages 444–451. IEEE, 2023.
- [9] Anca Marginean Groza, Adrian and Simona Delia Nicoara. An ontology for age-related macular degeneration using ophthalmologists and language models. In 14th Int. Conf. on Semantic Web Applications and Tools for Heath Care and Life Sciences, SWAT4LS,23, 2023.
- [10] Adrian Groza and Mihai Pomarlan. Towards an ontology of explanations. In Rubina Polovina, Simon Polovina, and Neil Kemp, editors, Measuring Ontologies for Value Enhancement: Aligning Computing Productivity with Human Creativity for Societal Adaptation, pages 73–85, Cham, 2023. Springer Nature Switzerland.
- [11] Adrian Groza Borbla Fazakas, Beta Keresztes. Generating and solving the lights out! game in first order logic. In *IEEE 18th International Conference on Intelligent Computer Communication and Processing*, ICCP'22, 2022.
- [12] Iulia Dragan and Adrian Groza. Ensemble-based knowledge distillation for semantic segmentation in autonomous driving. In *IEEE 18th International Conference on Intelligent Computer Communication and Processing*, ICCP'22, 2022.
- [13] Vlad Cofaru and Adrian Groza. Detecting clickbaits using deep forest. In *IEEE 18th International Conference on Intelligent Computer Communication and Processing*, ICCP'22, 2022.
- [14] Aron Katona Adrian Groza. Face: Fact checker with explanations. In 24th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, SYNASC22, 2022.
- [15] Adrian Groza. Detecting fake news using machine learning and reasoning in description logic. In 6th Workshop on Complexity in Engineering, COMPENG22, pages 1–4, 2022.
- [16] Ioan Alfred Letia and Adrian Groza. Modeling and simulation with ontology streams for agents interactions. In 6th Workshop on Complexity in Engineering, ESM22, 2022.
- [17] Loredana Coroama and Adrian Groza. Evaluation metrics in explainable artificial intelligence (xai). In Teresa Guarda, Filipe Portela, and Maria Fernanda Augusto, editors, Advanced Research in Technologies, Information, Innovation and Sustainability, ARTIIS'22, pages 401–413, Cham, 2022. Springer Nature Switzerland.
- [18] S. Uscov and A. Groza. Cat de inteligent este artificial intelligence act? Curierul judiciar, (2):70–83, 2022.
- [19] Adrian Groza and Cristian Nitu. Question answering over logic puzzles using theorem proving. In Proceedings of the 37th ACM/SIGAPP Symposium on Applied Computing, pages 871–874, 2022.
- [20] A. Groza P. Mateiu and C. Nica. Learning ontologies with relational concept analysis. In IEEE 20th Jubilee World Symposium on Applied Machine Intelligence and Informatics (SAMI), 3-5 March 2022, Poprad, Slovakia (. IEEE, 2022.
- [21] R. Sergiu and A. Groza. Logic-based machine comprehension for chatbots. In *IEEE 20th Jubilee World Symposium on Applied Machine Intelligence and Informatics (SAMI)*, 3-5 March 2022, Poprad, Slovakia (. IEEE, 2022.
- [22] Roxana Szomiu and Adrian Groza. A puzzle-based dataset for natural language inference. The 16ht Int. Conf. on Linguistic Resources and Tools for Natural Language Processing, 13-14 December 2021, Iasi, Romania, 2021.
- [23] Loredana Coroama and Adrian Groza. Explainable artificial intelligence for person identification. In 2021 IEEE 17th International Conference on Intelligent Computer Communication and Processing (ICCP), pages 375–382. IEEE, 2021.
- [24] Adrian Groza. Interleaved argumentation and explanation in dialog. In Pawel Lupkowski (eds) Mariusz Urbanski, Tomasz Skura, editor, Reasoning: Games, Cognition, Logic, LNAI, pages 119–140. College Publications, 2020.

- [25] Adrian Groza. On the differences between human agents and logic-based software agents discourse understanding. In R Prasath et al. (eds), editor, *MIKE 2020*, LNAI, page to appear. Springer, 2020.
- [26] Adrian Groza and Loredana Coroama. A mentalist agent for identifying characters using dynamic query strategies. In 2019 IEEE 15th International Conference on Intelligent Computer Communication and Processing (ICCP), pages 319–326. IEEE, 2019.
- [27] Anca Marginean, Adrian Groza, Simona Delia Nicoara, George Muntean, Radu Razvan Slavescu, and Ioan Alfred Letia. Towards balancing the complexity of convolutional neural network with the role of optical coherence tomography in retinal conditions. In 2019 IEEE 15th International Conference on Intelligent Computer Communication and Processing (ICCP), pages 475–482. IEEE, 2019.
- [28] Adrian Groza, Pinar Ozturk, Radu Razvan Slavescu, Anca Marginean, and Rajendra Prasath. Analysing climate change arguments using subjective logic. In 2018 IEEE 14th International Conference on Intelligent Computer Communication and Processing (ICCP), pages 37–44. IEEE, 2018.
- [29] Adrian Groza and Oana Maria Popa. The impact of summarisation on textual entailment-a case study on global warming arguments. In 2018 10th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), pages 1–6. IEEE, 2018.
- [30] Adrian Groza and Iulia Ungur. Improving conflict resolution in version spaces for precision agriculture. *International Journal of Agricultural Science*, 3, 2018.
- [31] Sergiu Redeca and Adrian Groza. Designing agents for the stratego game. In 2018 IEEE 14th International Conference on Intelligent Computer Communication and Processing (ICCP), pages 97–104. IEEE, 2018.
- [32] Daniel Toniuc and Adrian Groza. Climebot: An argumentative agent for climate change. In Intelligent Computer Communication and Processing (ICCP), 2017 13th IEEE International Conference on, pages 63–70. IEEE, 2017.
- [33] Roxana Szabo and Adrian Groza. Analysing debates on climate change with textual entailment and ontologies. In *Intelligent Computer Communication and Processing (ICCP)*, 2017 13th IEEE International Conference on, pages 39–46. IEEE, 2017.
- [34] Adrian Groza and Madalina Mandy Nagy. Harmonization of conflicting medical opinions using argumentation protocols and textual entailment-a case study on parkinson disease. In *Intelligent Computer Communication and Processing (ICCP)*, 2016 IEEE 12th International Conference on, pages 163–170. IEEE, 2016.
- [35] Adrian Groza and Oana Maria Popa. Mining arguments from cancer documents using natural language processing and ontologies. In *Intelligent Computer Communication and Processing (ICCP)*, 2016 IEEE 12th International Conference on, pages 77–84. IEEE, 2016.
- [36] Calin Cara, Adrian Groza, Sergiu Zaporojan, and Igor Calmicov. Assisting drivers during overtaking using car-2-car communication and multi-agent systems. In *Intelligent Computer Communication and Processing (ICCP)*, 2016 IEEE 12th International Conference on, pages 293–299. IEEE, 2016.
- [37] A. Groza, I. A. Letia, A. Goron, and S. Zaporojan. A formal approach for identifying assurance deficits in unmanned aerial vehicle software. In H. Selvaraj, D. Zydek, and G. Chmaj, editors, In Proceedings of 23 International Conference on Systems Engineering, Las Vegas, USA, volume 1089 of Advances in Intelligent Systems & Computing Series. Springer International Publishing, 2015.
- [38] S. Zaporojan, V. Moraru, and A. Groza. An approach to schedule production using reservation tables. In H. Selvaraj, D. Zydek, and G. Chmaj, editors, In Proceedings of 23 International Conference on Systems Engineering, Las Vegas, USA, volume 1089 of Advances in Intelligent Systems & Computing Series. Springer International Publishing, 2015.

- [39] Serban Groza and Adrian Groza. A formal approach for identifying assurance deficits in unmanned aerial vehicle software. In Matthias Thimm and Serena Villata, editors, System Descriptions of the First International Competition on Computational Models of Argumentation (ICCMA'15), Advances in Intelligent Systems & Computing Series. arXiv preprint arXiv:1510.05373, 2015.
- [40] Adrian Groza and Lidia Corde. Information retrieval in falktales using natural language processing. In *Intelligent Computer Communication and Processing (ICCP)*, 2015 IEEE International Conference on, pages 59–66. IEEE, 2015.
- [41] Adrian Groza and Szabo Roxana. Enacting textual entailment and ontologies for automated essay grading in chemical domain. In 16th Int. Symposium on Computational Intelligence and Informatics (CINTI2015), Budapest, Hungary, 19-21 November. IEEE, 2015.
- [42] Adrian Groza. Data structuring for the ontological modelling of wind energy systems. In 4th Int. Conf. on Modelling and Development of Intelligent Systems (MDIS2015), Sibiu, Romania, 28 Oct. 1 Nov. 2015, 2015.
- [43] A. Groza, I. Dragoste, I. Sincai, and I. Jimborean. An ontology selection and ranking system based on analytical hierarchy process. In 16th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC2014), Timisoara, Romania, 22-25 September 2014., 2014.
- [44] Adrian Groza and Nicoleta Marc. Consistency checking of safety arguments in the goal structuring notation standard. In *IEEE 10th International Conference on Intelligent Computer Communication and Processing (ICCP2014), Cluj-Napoca, Romania, 4-6 September 2014*, pages 59–66. IEEE, 2014.
- [45] Ioana Jimborean and Adrian Groza. Ranking ontologies in the ontology building competition boc 2014. In *IEEE 10th International Conference on Intelligent Computer Communication and Processing (ICCP2014), Cluj-Napoca, Romania, 4-6 September 2014*, pages 75–82. IEEE, 2014.
- [46] Daniel Suciu and Adrian Groza. Interleaving ontology-based reasoning and natural language processing for character identification in folktales. In *IEEE 10th International Conference on Intelligent Computer Communication and Processing (ICCP2014), Cluj-Napoca, Romania, 4-6 September 2014*, pages 67–74. IEEE, 2014.
- [47] S. A. Gomez, A. Goron, and A. Groza. Assuring safety in an air traffic control system with defeasible logic programming. In Argentine Symposium on Artificial Intelligence (ASAI14), 1-5 September 2014, Buenos Aires, Argentina, 2014.
- [48] V. Muresan, A. Abrudean, and A. Groza. Numerical simulation and automatic control of the ph value in an industrial blunting system. In *ICINCO2014*, 1-3 September, Vienna, Austria, 2014.
- [49] A. Groza, A. Marginean, and V. Muresan. An ontology-based model for vehicular ad-hoc networks. In 18th IEEE International Conference on Intelligent Engineering Systems (INES2014), 3-5 July, Tihany, Hungary. IEEE, 2014.
- [50] A Marginean, A Groza, R.R. Slavescu, and IA Letia. Romanian2sparql: A grammatical framework approach for querying linked data in romanian. In *Development and Application Systems (DAS)*, 2014 International Conference on, pages 204–209, May 2014.
- [51] Vasile Moraru, Sergiu Zaporojan., and Adrian Groza. A second order-cone programming relaxation for facility location problem. In *Development and Application Systems (DAS)*, 2014 International Conference on, pages 189–191, May 2014.
- [52] Adrian Groza, Bogdan Iancu, and Anca Marginean. A multi-agent approach towards cooperative overtaking in vehicular networks. In Rajendra Akerkar, Nick Bassiliades, John Davies, and Vadim Ermolayev, editors, WIMS, page 48. ACM, 2014.

- [53] S.A. Gmez, A. Groza, and C.I. Chesevar. An argumentative approach to assessing safety in medical device software using defeasible logic programming. In Simona Vlad and Radu V. Ciupa, editors, International Conference on Advancements of Medicine and Health Care through Technology; 5th 7th June 2014, Cluj-Napoca, Romania, volume 44 of IFMBE Proceedings, pages 167–172. Springer International Publishing, 2014.
- [54] A. Groza, A. Marginean, and B. Iancu. Towards improving situation awareness during emergency transportation through ambulance-2-x communication and semantic stream reasoning. In Simona Vlad and Radu V. Ciupa, editors, International Conference on Advancements of Medicine and Health Care through Technology; 5th 7th June 2014, Cluj-Napoca, Romania, volume 44 of IFMBE Proceedings, pages 97–100. Springer International Publishing, 2014.
- [55] S. Gomez, A. Groza, C. Chesnevar, I. A. Letia, A. Goron, and M Lucero. Argsafe: Usando argumentacion para garantizar seguridad en sistemas tecnicos complejos. In XVI Workshop de Investigadores en Ciencias dela Computation (WICC2014), Ushuaia, Tierra del Fuego, Argentina, 7-8 May 2014, 2014.
- [56] A. Groza, B. Varga, and M. Vacca. A learning environment for building and evaluating ontologies: case study of 2013 Ontology Building Competition. In Ion Roceanu, editor, Elearning and Software in Education (ELSE2014), Bucuresti, Romania. "Carol I" National Defence University Publishing House, 2014.
- [57] A. Goron, A. Groza, S. A. Gomez, and I. A. Letia. Towards an argumentative approach for repair of hybrid logics models. In *Argumentation in Multi-Agent Systems*, 2014.
- [58] Radu Balaj and Adrian Groza. Detecting influenza epidemics based on real-time semantic analysis of twitter streams. In Dana Simian, editor, *Modelling and Development of Intelligent System (MDIS2013)*, Sibiu, Romania, 10-12 Obtober 2014, pages 30–39. Lucian Blaga University Press, 2013.
- [59] Adrian Groza and Sergiu Zaporojan. Asdec: Structured argumentation for decision support systems under normative constraints. In 1st Workshop on Flexible Communication Between Human and Software Agents @ ROCHI2013, Cluj-Napoca, Romania, 4 September 2013., 2013.
- [60] Oxana Hotea and Adrian groza. Reasoning on semantic sensor streams for smart city. In International Conference on Intelligent Information Systems, Chisinau, Republic of Moldova, August 20-23, 2013, ISBN 978-9975-4237-1-7,, pages 219-222, 2013.
- [61] A. Groza Visinari Gabriela. Semantic-based monitoring of e-contracts. In 10th National Conference on Human Computer Interaction ROCHI 2013, pages 161–164, 2013.
- [62] Adrian Groza and Ioan Alfred Letia. Plausible description logic programs for stream reasoning. Future Internet, 4(4):865–881, 2012.
- [63] I.A. Letia and A. Groza. Interleaved argumentation and explanation in dialogue. In the 12th workshop on Computational Models of Natural Argument CMNA@ECAI, Montpellier, France, 27-28 August, 2012, page to appear, 2012.
- [64] Ioan Alfred Leţia and Adrian Groza. Arguing with justifications between collaborating agents,. In P. McBurney et al. (eds), editor, ARGMAS, 2012), volume 7543 of LNAI, pages 102–116. Springer, 2012.
- [65] Ioan Alfred Letia and Adrian Groza. Description plausible logic programs for stream reasoning. In Joaquim Filipe and Ana L. N. Fred, editors, ICAART (1), pages 560–566. SciTePress, 2012.
- [66] I. Letia and A. Groza. Justificatory argumentation for commitment agents. Argumentation in Multi-Agent Systems, 2012.
- [67] A. Groza. Integrated framework for multi-agent ontology engineering. In PostDoc Forum for the Excel Project, pages 99–106, 2012.
- [68] B. Bogdan A. Groza, G. Barbur. Ontology enrichment and evaluation using ontorich. Automation Computers Applied Mathematics, 2012.

- [69] I.A. Letia and A. Groza. Justifying argument and explanation in labelled argumentation. In *Intelligent Computer Communication and Processing (ICCP)*, 2012 IEEE International Conference on. IEEE, 2012.
- [70] I. Letia and A. Groza. Towards pragmatic argumentative agents within a fuzzy description logic framework. *Argumentation in Multi-Agent Systems*, pages 209–227, 2011.
- [71] I.A. Letia and A. Groza. Arguing with justifications between collaborating agents. *ArgMAS* 2011, page 44, 2011.
- [72] I.A. Letia, A. Groza, and R. Balaj. Argumentative agents for justifying decisions in audit. In *Intelligent Computer Communication and Processing (ICCP)*, 2011 IEEE International Conference on, pages 71–78. IEEE, 2011.
- [73] M. Georgiu and A. Groza. Ontology enrichment using semantic wikis and design patterns. *Romania*, 56(2):31–36, 2011.
- [74] A. Groza and C. Man. Towards automatic norm compliance in construction domain. In Applied Machine Intelligence and Informatics (SAMI), 2011 IEEE 9th International Symposium on, pages 83–87. IEEE, 2011.
- [75] B. Varga and A. Groza. Integrating dbpedia and sentiwordnet for a tourism recommender system. In *Intelligent Computer Communication and Processing (ICCP)*, 2011 IEEE International Conference on, pages 133–136. IEEE, 2011.
- [76] G. Visinari and A. Groza. Building an e-contract management system using google docs. In Computational Intelligence and Informatics (CINTI), 2011 IEEE 12th International Symposium on, pages 225–230. IEEE, 2011.
- [77] G. Barbur, B. Blaga, and A. Groza. Ontorich-a support tool for semi-automatic ontology enrichment and evaluation. In *Intelligent Computer Communication and Processing (ICCP)*, 2011 IEEE International Conference on, pages 129–132. IEEE, 2011.
- [78] A. Groza and I.A. Letia. Agent-based systems for norm compliance in food supply chains. Analele Universitatii de Vest din Timisoara, 48(3), 2011.
- [79] Adrian Groza and Radu Balaj. Using semantic wikis for structured argument in medical domain. In Workshop on Semantic Web Applications and Tools for Life Sciences, Berlin, Germany, 2010.
- [80] Ioan Alfred Letia and Adrian Groza. Developing hazard ontology for supporting haccp systems in food supply chains. In 8th IEEE International Symposium on Intelligent Systems and Informatics, pages 57–62, Subotica, Serbia, 2010.
- [81] Adrian Groza and Ioan Alfred Letia. Aiming to agent-based systems for norm compliance in food supply chains. In 7th Workshop on Agents for Complex Systems, Timisoara, Romania, 2010.
- [82] Sergiu Indrie and Adrian Groza. Towards social argumentative machines. In Ioan Alfred Letia, editor, 6th International Conference on Intelligent Computer Communication and Processing, pages 99–102, Cluj-Napoca, Romania, 2010.
- [83] Florin Lipan and Adrian Groza. Mining traffic patterns from public transportation GPS data. In Ioan Alfred Letia, editor, 6th International Conference on Intelligent Computer Communication and Processing, pages 123–126, Cluj-Napoca, Romania, 2010.
- [84] Sergiu Indrie and Adrian Groza. Enacting argumentative web in semantic wikipedia. In Remus Brad, editor, 9th RoEduNet International Conference, pages 163–168, Sibiu, Romania, 2010.
- [85] Ioan Alfred Leţia and Adrian Groza. Argumentative support for structured HACCP plans. In International Conference on Development and Application Systems, Suceava, Romania, 2010.
- [86] Ioan Alfred Leţia and Adrian Groza. Towards pragmatic argumentative agents within a fuzzy description logic framework. In Seventh International Workshop on Argumentation in Multi-Agent Systems (ArgMAS 2010), Toronto, Canada, 2010.

- [87] Adrian Groza. Modelling imprecise arguments in a weighted argument system. In Ioan Alfred Letia, editor, 5th International Conference on Intelligent Computer Communication and Processing, pages 43–46, Cluj-Napoca, Romania, 2009.
- [88] Ioan Alfred Letia and Adrian Groza. Contextual extension with concept maps in the argument interchange format. In Iyad Rahwan and Pavlos Moraitis, editors, ArgMAS, volume 5384 of Lecture Notes in Computer Science, pages 72–89. Springer, 2008.
- [89] Ioan Alfred Leţia and Adrian Groza. Contextual extension with concept maps in the argument interchange format ontology. In *Fifth International Workshop on Argumentation in Multi-Agent Systems (ArgMAS 2008)*, Estoril, Portugal, 2008.
- [90] Adrian Groza. Designing electronic markets for defeasible-based contractual agents. In Berndt Farwer and Michael Kohler, editors, First Workshop on Logics For Agents and Mobility, pages 27–42, Hamburg, Germany, 2008.
- [91] Ioan Alfred Letia and Adrian Groza. A planning-based approach for enacting world wide argument web. In Costin Badica, Giuseppe Mangioni, Vincenza Carchiolo, and Dumitru Dan Burdescu, editors, *IDC*, volume 162 of *Studies in Computational Intelligence*, pages 137–146. Springer, 2008.
- [92] Adrian Groza. Q-learn argumentation schemes for car sales dialogues. In Ioan Alfred Letia, editor, 4rd IEEE International Conference on Intelligent Computer Communication and Processing (ICCP06), pages 257–260, Cluj-Napoca, Romania, 2008.
- [93] Adrian Groza and Ioan Alfred Leţia. A computational model for world wide argument web. In 13th Estonian Winter School in Computer Science (EWSCS08), page 7, Palmse, Estonia, 2008.
- [94] Ioan Alfred Leţia and Adrian Groza. Structured argumentation in a mediator for online dispute resolution. In B. Riemsdijk M. Winikoff M. Boldoni, T. Son, editor, *Declarative Agent Languages and Technologies (DALT 2007)*, volume 4897 of *LNAI*, pages 193–200. Springer, 2007.
- [95] Ioan Alfred Leţia and Adrian Groza. Planning with argumentation schemes in online dispute resolution. In Ioan Alfred Letia, editor, 3rd IEEE International Conference on Intelligent Computer Communication and Processing (ICCP06), pages 1–10, Cluj-Napoca, Romania, 2007.
- [96] Ioan Alfred Leţia and Adrian Groza. Exploiting rough argumentation in an online dispute resolution mediator. In Marzena Kryszkiewicz, James F. Peters, Henryk Rybinski, and Andrzej Skowron, editors, RSEISP, volume 4585 of Lecture Notes in Computer Science, pages 697–706. Springer, 2007.
- [97] Ioan Alfred Leţia, Anca Marginean, and Adrian Groza. Z-based agents for service oriented computing. In Jingshan Huang, Ryszard Kowalczyk, Zakaria Maamar, David L. Martin, Ingo Müller, Suzette Stoutenburg, and Katia P. Sycara, editors, SOCASE, volume 4504 of Lecture Notes in Computer Science, pages 160–174. Springer, 2007.
- [98] Ioan Alfred Leţia and Adrian Groza. An argumentative system for online dispute resolution. In I. Dumitrache and S. Iliescu, editors, The 16 International Conference on Control Systems and Computer Science, pages 2–9, Bucuresti, Romania, 2007.
- [99] Ioan Alfred Leţia and Adrian Groza. Structured argumentation in a mediator for online dispute resolution. In M. Boldoni, T. Son, B. Riemsdijk, and M. Winikoff, editors, *Declarative Agent Languages and Technologies (DALT 2007)*, pages 83–98, Honolulu, SUA, 2007.
- [100] Adrian Groza and Ioan Alfred Leţia. Towards mediation with extended, temporal defeasible logic. In Phd. Poster Session during Advanced Course on Artificial Intelligence, (ACAI07), page 22, Leuven, Belgium, 2007.
- [101] Ioan Alfred Leţia and Adrian Groza. Defeasible commitments for contract representation. In Ioan Alfred Leţia, editor, 2nd IEEE International Conference on Intelligent Computer Communication and Processing (ICCP06), pages 45–52, Cluj-Napoca, Romania, 2006.

- [102] Ioan Alfred Letia and Adrian Groza. Running contracts with defeasible commitment. In Moonis Ali and Richard Dapoigny, editors, IEA/AIE, volume 4031 of Lecture Notes in Computer Science, pages 91–100. Springer, 2006.
- [103] Ioan Alfred Leţia and Adrian Groza. Agreeing on defeasible commitments. In Matteo Baldoni and Ulle Endriss, editors, *DALT*, volume 4327 of *Lecture Notes in Computer Science*, pages 156–173. Springer, 2006.
- [104] Ioan Alfred Leţia and Adrian Groza. Agreeing on defeasible commitments. In Matteo Baldoni and Ulle Endriss, editors, Declarative Agent Languages and Technologies, pages 98–113, Hakodate, Japan, 2006.
- [105] Ioan Alfred Leția and Adrian Groza. Exceptions in contract in defeasible logic. In Adrian Graur, editor, *The 8th International Conference on Development and Application Systems*, pages 374–381, Suceava, Romania, 2006.
- [106] Ioan Alfred Leţia and Adrian Groza. Automating the dispute resolution in a task dependency network. In Andrzej Skowron, Jean-Paul A. Barthès, Lakhmi C. Jain, Ron Sun, Pierre Morizet-Mahoudeaux, Jiming Liu, and Ning Zhong, editors, IAT, pages 365–371. IEEE Computer Society, 2005.
- [107] Ioan Alfred Leţia and Adrian Groza. Automating the dispute resolution for B2B. In M. Lungu and Costin Badica, editors, *The International Symposium on System Theory, Automation, Robotics, Computers, Informatics, Electronics and Instrumentation*, pages 570–575, Craiova, Romania, 2005.
- [108] Ioan Alfred Leţia and Adrian Groza. Z-based agents for service oriented computing. In Ioan Dumitrache and Catalin Buiu, editors, The 16 International Conference on Control Systems and Computer Science, pages 591–596, Bucureşti, Romania, 2005.
- [109] Ioan Alfred Leţia and Adrian Groza. Specification-based agents for service composition. In Workshop on Service-Oriented Computing and Agent-Based Engineering, pages 17–24, Utrecht, The Nethrlands, 2005.
- [110] Ioan Alfred Leţia and Adrian Groza. Using agent similarities in business rules for the supply chain. Automation Computers Applied Mathematics, 13(2):232–235, 2004.
- [111] Ioan Alfred Leţia and Adrian Groza. Using agent similarities in business rules for the supply chain. In S. Nedevschi and I. Rudas, editors, *The 8th IEEE International Conference on Intelligent Engineering Systems*, pages 68–72, Cluj-Napoca, Romania, 2004.
- [112] Ioan Alfred Leţia and Adrian Groza. Finding agent similarities in supply chain formation. Advances in Electrical and Computer Engineering, 4(1):49–56, 2004.
- [113] Adrian Groza and Dorian Gorgan. Invatare si adaptabilitate in modelul de obiecte active. In Pribeanu Trausan-Matu St, editor, *ROCHI04*, pages 253–262, Bucuresti, Romania, 2004.
- [114] Ioan Alfred Leţia and Adrian Groza. Bidding for composite products using plans for matching the substitute items. In The 5th ACM Conference on Electronic Commerce, Workshop on Agents and Electronic Commerce, pages 13–17, Pittsburgh, PA, USA, 2003.