

Memoriul științific al studentului doctorand

MEMORIU ȘTIINȚIFIC Drd. NEDELCU IRINA-GABRIELA

Studii de doctorat

Perioada: 2021 - 2026

Conducător științific: Prof.dr.ing. ANCA DANIELA IONITĂ

Domeniu: INGINERIA SISTEMELOR

Titlul tezei de doctorat: AUTOMATIC ANALYSIS OF SOFTWARE MODELS BASED ON NEURAL NETWORKS

Activitate științifică

A. Lista de lucrări științifice (articole în reviste sau volume)

1. **Nedelcu, I., Caramihai, S.I., Mocanu, S., & Ionita, A.D.** (2023). "UML Diagrams Classification with MIMO and SISO Neural Networks". University Politehnica of Bucharest Scientific Bulletin, Series C, 85(4), pp. 1–10. WOS:001126672900020
2. **Nedelcu, IG., & Ionita, A. D.** (2024). Evaluating the Conformity to Types of Unified Modeling Language Diagrams with Feature-Based Neural Networks. Applied Sciences, 14(20), 9470. <https://doi.org/10.3390/app14209470>, Impact Factor 2.5, Q2 in ENGINEERING, MULTIDISCIPLINARY, WOS:001341585000001
3. **Nedelcu, IG., Ionita, A.D., Mocanu, S. & Saru, D.**, "UML Class Model Generation of Images Using Neural Networks," 2022 29th International Conference on Systems, Signals and Image Processing (IWSSIP), Sofia, Bulgaria, 2022, pp. 1-4, doi: 10.1109/IWSSIP55020.2022.9854486. WOS:000859804900061
4. **Opranescu, V., Nedelcu, I., & Ionita, A.D.** "Automating Students' Decision Processes in a Smart Campus". 2023 13th International Symposium on Advanced Topics in Electrical Engineering (ATEE), IEEE, Bucharest, Romania, pp. 1–6. doi: 10.1109/ATEE58038.2023.10108094.
5. **Nedelcu, IG., Opranescu, V., Chiriac, BN., Ionita, A.D.** (2024). Educational Support for Automated Classification of UML Diagrams Using Machine Learning. In: Sifaleras, A., Lin, F. (eds) Generative Intelligence and Intelligent Tutoring Systems. ITS 2024. Lecture Notes in Computer Science, vol 14799. Springer, Cham. https://doi.org/10.1007/978-3-031-63031-6_16. WOS:001285484200016
6. **Nedelcu, IG., Mocanu, S., Saru, D., Caramihai, S.I. & Ionita, A.D.** (2025). Performance of Neural Networks for Recognizing Images of UML Class, Sequence and State Diagrams. In: Sifaleras, A., Lin, F. (eds) Generative Intelligence and Intelligent Tutoring Systems. ITS 2025. Lecture Notes in Computer Science, vol 15724. Springer, Cham, pp. 104-113, <https://doi.org/10.1007/978-3-031-98284-2>, To be indexed in WOS
7. **Nedelcu, IG., Mocanu, S., Saru, D., Popescu, E., Caramihai, S.I. & Ionita, A.D.**, "Automatic Assessment of UML Models Based on Neural Networks for Students in a Software Engineering Course," Research Square, preprint, 2024. doi: 10.21203/rs.3.rs-9428571/v1.

B. Cărți și manuale

1. Autor / autori, anul „*titlu lucrare*”, Editura, ISBN;
2.

C. Participări la conferințe/workshop-uri

1. Participat cu "UML Class Model Generation of Images Using Neural Networks," la 2022 29th International Conference on Systems, Signals and Image Processing (IWSSIP), Sofia, Bulgaria, 2022
2. Participat cu "ENgineering Responsible Smart Systems (EN-RSS)" la Smart Diaspora 2023 workshop in Timisoara, Romania, intre April 10 si April 13, 2023, gazduit de West University of Timisoara.
3. Participat cu "Educational Support for Automated Classification of UML Diagrams Using Machine Learning" la Generative Intelligence and Intelligent Tutoring Systems. ITS 2024.
4. Participat cu "Performance of Neural Networks for Recognizing Images of UML Class, Sequence and State Diagrams" la Generative Intelligence and Intelligent Tutoring Systems. ITS 2025.

D. Brevete

1.

E. Proiecte de cercetare științifică

1.

F. Stagii de perfecționare

1.

G. Cursuri de perfecționare

1.

H. Membru în comitete de organizare sau comitete științifice ale conferințelor/colective de redacție ale unor reviste

1.

Student-doctorand

Nedelcu Irina-Gabriela

