

A1. Activitatea didactică / profesională**A1.1. Cărți de autor sau capitole [1] de specialitate la edituri cu ISBN**

A1.1.1. Cărți/monografii/capitole [1] de specialitate la edituri internaționale cu ISBN (50/nr. de autori sau 100/nr. de autori cu condiția [2])

Nr. crt.	Lucrare	Punctaj
1.	Suciu, C., Itu, L.M., Nita, C., Vizitiu, A. , Stroia, A., Lazăr, Gîrbea, A., Foerster, U., Mihalef, V. <i>GPU-based High Performance Computing: Employing massively parallel processors for speeding-up compute intensive algorithms</i> , capitol în <i>Patient-specific Hemodynamic Computations: Application to Personalized Diagnosis of Cardiovascular Pathologies</i> , Springer, Heidelberg, Germany, 2017, 234 pp., ISBN: 78-3-319-56852-2, DOI: 10.1007/978-3-319-56853-9. https://link.springer.com/chapter/10.1007/978-3-319-56853-9_7	100/9 = 11.11
		1 lucrare = 11.11 pct.

A1.1.2. Cărți/monografii/capitole [1] de specialitate în edituri naționale cu ISBN (50/nr. de autori)

Total A1.1 : 11.11 puncte (1 lucrare)

A1.2. Material didactic/Lucrări didactice publicate la edituri cu ISBN

A1.2.1. Manuale didactice (40/nr. de autori)

Nr. crt.	Lucrare	Punctaj
1	Vizitiu A. <i>Tehnici de optimizare. Îndrumar de laborator pentru disciplina Optimizări</i> . Editura Universității Transilvania din Brașov, 2020, 61 pag., ISBN: 978-606-19-1418-0 (Cod CNCIS 81)	40/1 = 40
		1 lucrare = 40 pct.

Total A1.2 : 40 puncte (1 lucrare)

Total A1 : 51.11 puncte

Domeniul de activitate	Condiții minime obligatorii pe subcategorii – Conferențial	Realizat
A1 – Activitatea didactică/profesională	50	51.11
A1.1.1 – A1.1.2 Cărți de specialitate	1	1

Șef lucr. dr. ing. Anamaria Vizitiu



A2. Activitatea de cercetare

A2.1. Articole în reviste cotate ISI și lucrări în volumele unor manifestări științifice indexate ISI ((25+30 x factor impact [3])/nr. de autori)

Nr. crt.	Lucrare	Pct.
1	Stoian, D.I., Leonte, H.A., Vizitiu, A. , Suciuc, C., Itu, L.M. <i>Deep Neural Networks in Medical Imaging: Privacy Preservation, Image Generation and Applications</i> . Applied Sciences. 2023; Vol. 13(21), DOI:10.3390/app132111668 (ISI journal, WOS:001103349800001, FI: 2.7). https://www.mdpi.com/2076-3417/13/21/11668 [Q1-Q2]	21.2
2	Ogrezeanu, I., Vizitiu, A. , Ciușdel, C.F., Puiu, A., Coman, S., Boldisor, C., Itu, A., Demeter, R., Moldoveanu, F., Suciuc, C., Itu, L.M. <i>Privacy-Preserving and Explainable AI in Industrial Applications</i> . Applied Sciences. 2022; Vol. 12(13):6395, DOI: 10.3390/app12136395 (ISI journal, WOS:000824322700001, FI: 2.7). https://www.mdpi.com/2076-3417/12/13/6395 [Q1-Q2]	9.63
3	Vizitiu, A. , Nita, C.I., Toev, R.M., Suditu, T., Suciuc, C., Itu, L.M. <i>Framework for Privacy-Preserving Wearable Health Data Analysis: Proof-of-Concept Study for Atrial Fibrilația Detection</i> . Applied Sciences. 2021; Vol. 11(19):9049, DOI: 10.3390/app11199049 (ISI journal, WOS:000706506300001, FI: 2.7). https://www.mdpi.com/2076-3417/11/19/9049 [Q1-Q2]	17.66
4	Popescu, A.B., Taca, I.A., Vizitiu, A. , Nita, C.I., Suciuc, C., Itu, L.M., Scafa-Udriște, A. <i>Obfuscation Algorithm for Privacy-Preserving Deep Learning-Based Medical Image Analysis</i> . Applied Sciences. 2022; Vol. 12(8): 3997, DOI: 10.3390/app12083997 (ISI journal, WOS:000786778400001, FI: 2.7). https://www.mdpi.com/2076-3417/12/8/3997 [Q1-Q2]	17.66
5	Tzelves, L., Manolitsis, I., Varkarakis, I., Ivanović, M., Kokkonidis, M., Useros, C.S., Kosmidis, T., Muñoz, M., Grau, I., Athanatos, M., Vizitiu, A. , Lampropoulos, K., Koutsouri, T., Stefanatou, D., Perrakis, K., Stratigaki, C., Autexier, S., Kosmidis, P.A., Valachis, A. <i>Artificial intelligence supporting cancer patients across Europe—The ASCAPE project</i> . PLoS ONE, 2022; Vol. 17(11): e0265127, DOI: 10.1371/journal.pone.0265127 app11199049 (ISI journal, WOS:000795468200033, FI: 3.7). https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0265127 [Q1-Q2]	7.15
6	Lluch, È., Mihalef, V., Vizitiu, A. , Passerini, T., Audigier, C., Halperin, H., Haschemi, M., Ashikaga, H., Mansi, T. Abstract 11195: <i>Is Personalized Computational Model of Atrial Fibrillation Really Personalized?</i> Circulation. 2021; Vol. 44, DOI: 10.1161/circ.144.suppl_1.11195 (ISI journal WOS:000752020003282, FI 37.8). https://www.ahajournals.org/doi/abs/10.1161/circ.144.suppl_1.11195 [Q1-Q2]	128.77
7	Popescu, A.B., Taca, I.A., Nita, C.I., Vizitiu, A. , Demeter, R., Suciuc, C., Itu, L.M. <i>Privacy Preserving Classification of EEG Data Using Machine Learning and Homomorphic Encryption</i> . Applied Sciences. 2021; Vol. 11(16):7360, DOI: 10.3390/app11167360 (ISI journal WOS:000688754400001, FI 2.7). https://www.mdpi.com/2076-3417/11/16/7360 [Q1-Q2]	15.14
8	Puiu, A., Vizitiu, A. , Nita, C., Itu, L., Sharma, P., Comanicu, D. <i>Privacy-Preserving and Explainable AI for Cardiovascular Imaging</i> . Studies in informatics and control. 2021; Vol.	12.41

	30, pp. 21-32, DOI: 10.24846/v30i2y202102 (ISI journal WOS:000665728800002, FI 1.649). https://journals.indexcopernicus.com/search/article?articleId=2929025	
9	Vizitiu, A. , Niță, C.I., Puiu, A., Suciu, C., Itu, L.M., <i>Applying Deep Neural Networks Over Homomorphic Encrypted Medical Data</i> , Computational and Mathematical Methods in Medicine, Hindawi, 2020; Vol. 2020, DOI: 10.1155/2020/3910250 (ISI journal WOS:000529111500001, FI 2.809). https://www.hindawi.com/journals/cm/mm/2020/3910250/ [Q1-Q2]	21.85
10	Lampropoulos, K., Kosmidis, T., Autexier, S., Savić, M., Athanatos, M., Kokkonidis, M., Koutsouri, T., Vizitiu, A., Valachis, A., Quintero Padron, M. <i>ASCAPE: An open AI ecosystem to support the quality of life of cancer patients</i> . 9th IEEE International Conference on Healthcare Informatics, August 09-12, 2021, pp. 301-310, DOI: 10.1109/ICHI52183.2021.00054 (ISI Proceedings, WOS:000853083300042). https://ieeexplore.ieee.org/document/9565773	3.25
11	Popescu, A.B., Nita, C.I., Taca, I.A., Vizitiu, A. , Itu, L.M. <i>Privacy-Preserving Medical Image Classification through Deep Learning and Matrix Decomposition</i> . 2023 31st Mediterranean Conference on Control and Automation, Limassol, Cyprus, June 26-29, 2023, pp. 305-310, DOI: 10.1109/MED59994.2023.10185748 (ISI Proceedings, WOS:001042336800051). https://ieeexplore.ieee.org/document/10185748	6.5
12	Gallos, P., Aso, S., Autexier, S., Brotons, A., Nigro, A.D., Jurak, G., Kiourtis, A., Kranas, P., Kyriazis, D., Luštrek, M., Magdalinou, A., Maglogiannis, I., Mantas, J., Martínez, A., Menychtas, A., Montandon, L., Picioroaga, F., Perez, M., Stanimirovic, D., Starc, G., Tomson, T., Vilar-Mateo, R., Vizitiu, A. <i>CrowdHEALTH: Big Data Analytics and Holistic Health Records</i> . Studies in health technology and informatics, Hanover, Germany, April 07-10, 2019, Vol. 258, pp. 255-256, DOI: 10.3233/978-1-61499-959-1-255 (ISI Proceedings, WOS:000631831500063). https://europepmc.org/article/med/30942764	1.41
13	Vizitiu, A. , Niță, C.I., Puiu, A., Suciu, C., Itu, L.M., <i>Towards Privacy-Preserving Deep Learning based Medical Imaging Applications</i> , 14th IEEE Inter. Symp. on Medical Measurements and Applications, Istanbul, Turkey, June 26-28, 2019, pp. 1-6, DOI: 10.1109/MeMeA.2019.8802193 (ISI Proceedings, WOS:000497499300061). https://ieeexplore.ieee.org/abstract/document/8802193	6.5
14	Vizitiu, A. , Nita, IC., Puiu, A., Suciu, C., Itu, L. <i>Privacy-Preserving Artificial Intelligence: Application to Precision Medicine</i> . 2019 41st Inter. Conf. of the IEEE Engineering in Medicine & Biology Society, Berlin, Germany, July 23-27, 2019, pp. 6498-6504, DOI:10.1109/embc.2019.8857960 (ISI Proceedings, WOS:000557295306212). https://ieeexplore.ieee.org/abstract/document/8857960 .	6.5
15	Vizitiu, A. , Puiu, A. Reangamornrat, S., Itu, L. <i>Data-Driven Adversarial Learning for Sinogram-Based Iterative Low-Dose CT Image Reconstruction</i> , 23rd Inter. Conf. on System Theory, Control and Computing, Sinaia, Romania, October 9-11, 2019, pp. 668-674, DOI: 10.1109/icstcc.2019.8885947 (ISI Proceedings, WOS:000590181100113). https://ieeexplore.ieee.org/abstract/document/8885947	8.12
16	Danu, M.D, Niță, C.I., Vizitiu, A. , Suciu, C., Itu, L. <i>Deep Learning based Generation of Synthetic Blood Vessel Surfaces</i> , 23rd Inter. Conf. on System Theory, Control and Computing, Sinaia, Romania, October 9-11, 2019, pp. 662-667, DOI: 10.1109/icstcc.2019.8885576 (ISI Proceedings, WOS:000590181100112). https://ieeexplore.ieee.org/abstract/document/8885576	6.5
17	Ciușdel, C., Vizitiu, A. , Moldoveanu, F., Suciu, C., Itu, L.M. <i>Towards Real Time Machine Learning based Estimation of Fracture Risk in Osteoporosis Patients</i> , Joint Inter. Conf. OPTIM-ACEMP, Brașov, Romania, May 25-27, 2017, pp. 101-106, DOI: 10.1109/OPTIM.2017.7975126 (ISI Proceedings, WOS:000426909600179). https://ieeexplore.ieee.org/abstract/document/7975126	6.5
18	Vizitiu, A. , Itu, L.M., Joyseeree, R., Depeursinge, A., Müller, H., Suciu, C. <i>GPU-Accelerated Texture Analysis Using Steerable Riesz Wavelets</i> . 2016 24th Euromicro International Conference on Parallel, Distributed, and Network-Based Processing (PDP), Heraklion, Greece, Feb. 17-19, 2016, pp 431-434, DOI: 10.1109/PDP.2016.105 (ISI Proceedings,	5.41

	WOS:000381810900066). https://ieeexplore.ieee.org/abstract/document/7445372	
19	Vizitiu, A. , Itu, L.M., Lazar, L., Suciuc, C. (2014). <i>Double precision stencil computations on Kepler GPUs</i> . 2014 18th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, Oct. 17-19, 2014, pp. 123-127, DOI: 10.1109/ICSTCC.2014.6982402 (ISI Proceedings, WOS:000704338900022). https://ieeexplore.ieee.org/abstract/document/6982402	8.12
20	Vizitiu, A. , Itu, L.M., Nita, C., Suciuc, C. <i>Optimized three-dimensional stencil computation on Fermi and Kepler GPUs</i> . 2014 IEEE High Performance Extreme Computing Conference (HPEC), Avenue Waltham, MA, September 11-14, 2014, pp. 1-6, DOI: 10.1109/HPEC.2014.7040968 (ISI Proceedings, WOS:000380479300026). https://ieeexplore.ieee.org/abstract/document/7040968	8.12
9 lucrări în reviste cotate ISI, 11 lucrări în volumele unor manifestări științifice indexate ISI proceedings		318.40 pct.

Total A2.1 : 318.40 puncte (20 lucrări)

A2.2. Articole în reviste și în volumele unor manifestări științifice indexate în alte baze de date internaționale recunoscute (BDI [4]) (20/nr.de autori)

Nr. crt.	Lucrare	Pct.
1	Ciușdel, C., Vizitiu, A. , Moldoveanu, F., Suciuc, C., Itu, L.M., <i>Towards Real Time Deep Learning based Estimation of Fracture Risk in Osteoporosis Patients</i> , 40th Inter. Conf. on Telecommunications and Signal Processing, Barcelona, Spain, July 5-7, 2017, pp. 68-73, DOI: 10.1109/TSP.2017.8076069 (IEEE Xplore). https://ieeexplore.ieee.org/abstract/document/8076069	4
2	Vizitiu, A. , Mohaiu, A.T., Popdan, I.M., Balachandran, A., Ghesu, F.C., Comaniciu, D. <i>Multi-scale Self-Supervised Learning for Longitudinal Lesion Tracking with Optional Supervision</i> . International Conference on Medical Image Computing and Computer-Assisted Intervention Vancouver, BC, Canada, October 8–12, 2023, Proceedings, Part I, DOI: 10.1007/978-3-031-43907-0 (Springerlink). https://link.springer.com/chapter/10.1007/978-3-031-43907-0_55	3.33
3	Taca, I.A., Mohaiu, A.T., Itu, L.M., Dorobanțu, M., Cojocaru, C., Fronea, O.F., Vijiiac, A.E., & Vizitiu, A. <i>Missing Values Imputation in the SEPHAR IV Echocardiographic Study</i> . 2022 IEEE 20th International Power Electronics and Motion Control Conference (PEMC), Brasov, Romania, 25-28 September, 2022, pp. 268-274. DOI: 10.1109/PEMC51159.2022.9962885 (IEEE Xplore). https://ieeexplore.ieee.org/document/9962885	2.5
4	Popescu, A.B., Nita, C.I., Taca, I.A., Vizitiu, A. , Itu, L.M. <i>Non-bijectionality-based image obfuscation method for deep learning based medical applications</i> . 2022 International Conference on Development and Application Systems (DAS), Suceava, Romania, 26-28 May, 2022, pp. 132-136, DOI: 10.1109/DAS54948.2022.9786187 (IEEE Xplore). https://ieeexplore.ieee.org/abstract/document/9786187	4
4 lucrări în reviste și volumele unor manifestări științifice indexate BDI		13.83 pct.

Total A2.2 : 13.83 puncte (4 lucrări)

A2.3. Proprietate intelectuală, brevete de invenție, certificate ORDA**A2.3.1. Internaționale [5] (35/70 pct./ nr. autori)**

Nr. crt.	Brevet	Pct.
1	Vizitiu, A. , Nita, IC., Itu, L., Sharma, P., Kraus, M., <i>AI based system and method for secure data processing - applications in clinical workflow deployment and model training</i> , European Patent Application EP 3716122 (A1), September 2020. https://data.epo.org/gpi/EP3716122A1-AI-BASED-SYSTEM-AND-METHOD-FOR-SECURE-DATA-PROCESSING-APPLICATIONS-IN-CLINICAL-WORKFLOW-DEPLOYMENT-AND-MODEL-TRAINING	14
2	Itu, L.M., Lazar, L., Liu. S., Pauly, O., Seegerer, P., Stroia, I.I, Turcea,A., Vizitiu, A. , Xu, X., Zhou, S.K., <i>Semantic segmentation for cancer detection in digital breast tomosynthesis</i> , European Patent Application EP 3432263 (B1), September 2020. https://patents.google.com/patent/EP3432263B1/en	7
3	Vizitiu, A. , Ecabert O., Kretschmer J., Neumann D., <i>Method and data processing unit for segmenting an object in a medical image</i> , US Patent Application, US 9811906 (B1), April 2017. https://patents.google.com/patent/US20140294269/es	17.5
4	Vizitiu, A. , Murthy, V.N., Kirchberg, K., Bekhtaoui, W., Liao, R., <i>Dynamic vessel roadmapping</i> , European Patent Application, EP 4283561 (A1), November 2023. https://patents.google.com/patent/EP4283561A1/en	14
5	Popescu, A.B., Nita, IC., Taca, I., Vizitiu, A. , Itu, L., Sharma., P., <i>Privacy preserving artificial intelligence based clinical decision support</i> , European Patent Application, EP 4120617 (A1), January 2023. https://patents.google.com/patent/EP4120617A1	11.66
6	Murthy, V.N., Vizitiu, A. , Liao, R., <i>Dynamic Vessel Roadmap Guidance</i> , European Patent Application, EP 4321103 (A1), February 2024. https://patents.google.com/patent/EP4321103A1	23.33
		87.49 pct.

A2.3.2. Naționale (OSIM) (25 pct./ nr. autori)**Total A2.3 : 87.49 puncte****A2.4. Granturi / proiecte de cercetare câștigate prin competiție [6] sau contracte cu agenți economici, în valoare de minimum 10.000 dolari USA echivalent încasați [6]****A2.4.1. Director/ responsabil partener****A2.4.1.1. Internaționale (20 x ani de desfășurare)**

Nr. crt.	Proiect	Pct.
1	Contr. REMINDER - pRivacy-prEserving Machine LearnIng through secure managemEnt of Data's lifecyclE in distRibuted systems, CHIST-ERA, finanțat de EU Commission / UEFISCDI, 2024-2026, 200.000 Euro, beneficiar: SC Siemens SRL (partener).	40
		40 pct.

A2.4.1.2. Naționale (10 x ani de desfășurare)

Nr. crt.	Proiect	Pct.
1	Contract No. GMVROM CREAMPET/TUB 30237/24, AUTONOMOUS COLLISION AVOIDANCE SYSTEMS FOR GROUND CONTROL CENTRES WITH DATA PRIVACY PROTECTION, 2024-2025, finanțat de GMV Innovating Solutions S.R.L., 91,935.20, beneficiar: Universitatea Transilvania din Brașov.	20
		20 pct.

A2.4.2. Membru în echipă

A2.4.2.1. Internaționale (4 x ani de desfășurare)

Nr. crt.	Proiect	Pct.
1	Contr. nr. 600932/2013-2017, program: EU's Seventh Framework Programme for Research (FP7) – <i>MD PAEDIGREE – Model-Driven European Paediatric Digital Repository</i> , finanțat de EU Commission. Beneficiar: Universitatea Transilvania din Brașov (partener). http://www.md-paedegree.eu/	16
2	Contr. nr. 732907/2016-2019, program: Horizon 2020 (H2020) – <i>MHMD – My Health My Data</i> , finanțat de EU Commission. Beneficiar: Universitatea Transilvania din Brașov (partener). http://www.myhealthmydata.eu/	12
3	Contr. nr. 10/2017/2017-2020, program: FLAG-ERA – <i>CONVERGENCE – Frictionless Energy Efficient Convergent Wearables for Healthcare and Lifestyle Applications</i> , finanțat de EU Commission / UEFISCDI. Beneficiar: Universitatea Transilvania din Brașov (partener). https://www.flagera.eu/wp-content/uploads/2016/02/FLAG-ERA_JTC2016_Project_flyer_Convergence_v0.3.pdf	12
4	Contr. nr. 8/2017/2017-2020, program: FLAG-ERA – <i>ITFoC – Information Technology: The Future of Cancer Treatment</i> , finanțat de EU Commission / UEFISCDI. Beneficiar: Universitatea Transilvania din Brașov (partener). https://itfoc.eu/ https://www.flagera.eu/wp-content/uploads/2016/02/FLAG-ERA_JTC2016_Project_flyer_ITFoC_v0.3.pdf	12
5	Contr. nr. 11/2017/2017-2020, program: FLAG-ERA – <i>FuturICT2.0 – Large scale experiments and simulations for the second generation of FuturICT</i> , finanțat de EU Commission / UEFISCDI. Beneficiar: Universitatea Transilvania din Brașov (partener). https://foturict2.eu/ https://www.flagera.eu/wp-content/uploads/2016/02/FLAG-ERA_JTC2016_Project_flyer_FuturICT_2.0_v0.4.pdf	12
6	Contr. nr. 6/2017/2017-2020, program: FLAG-ERA – <i>RoboCom++ – Rethinking Robotics for the Robot Companion of the future</i> , finanțat de EU Commission / UEFISCDI. Beneficiar: Universitatea Transilvania din Brașov (partener). http://robocomplusplus.eu/ https://www.flagera.eu/wp-content/uploads/2016/02/FLAG-ERA_JTC2016_Project_flyer_RoboCom_v0.3.pdf	12

7	Contr. nr. 141/2020-2023, program: ERA-PerMed JTC 2019, <i>Parameterisation of large-scale cancer models for personalised therapy of triple negative breast cancer</i> , finanțat de EU Commission / UEFISCDI. Beneficiar: Universitatea Transilvania din Brașov (partener).	12
8	Contr. nr. 197/2021-2023, program: ERA-PerMed JTC 2020, <i>PRecisiOn medicine in CAD patients: artificial intelliGence for integRated gEnomic, functional, and anatomical aSSessment of the coronary collateral circulation</i> , finanțat de EU Commission / UEFISCDI. Beneficiar: Universitatea Transilvania din Brașov (partener).	8
9	Contr. nr. 101017578/2021-2023, program: H2020-SC1-DTH-2018-2020, <i>In Silico testing and validation of Cardiovascular Implantable devices</i> , finanțat de EU Commission. Beneficiar: Universitatea Transilvania din Brașov (partener).	8
		104 pct.

A2.4.2.2. Naționale (2 x ani de desfășurare)

Nr. crt.	Proiect	Pct.
1.	Contr. nr. 233PED/2017, 2017-2018, program PNIII: Programul 2 - Creșterea competitivității economiei românești prin cercetare, dezvoltare și inovare – <i>Machine learning based real-time computation of hemodynamic quantities from medical images</i> , finanțat de UEFISCDI. Beneficiar: Universitatea Transilvania din Brașov (coordonator).	4
2	Contr. nr. 108PTE/2022-2024, program PNIII-P2-2.1-PTE, <i>Prototype for personalized assessment of cardiovascular risk and post-COVID myocarditis based on artificial intelligence, advance medical imaging and cloud computing</i> , finanțat de UEFISCDI. Beneficiar: Universitatea Transilvania din Brașov (partener).	4
3	Contr. nr. TE183/2021-2022, program: PN-III-P3-3.6-H2020, <i>Artificial iNtelligence-based platfOrm for geNeRating sYnthetic Medical DATA</i> , finanțat de UEFISCDI. Universitatea Transilvania din Brașov (coordonator).	4
4	Contr. nr. 284PED/2020-2022, program PN-III-P2-2.1-PED, <i>PrivaCY-Preserving personalized medicine solutions through Homomorphically EncRypted Artificial Intelligence</i> , finanțat de UEFISCDI. Universitatea Transilvania din Brașov (coordonator).	4
		16 pct.

Total A2.4 : 180 puncte**Total A2 : 599.72 puncte**

Indicator	Condiții minimale – Conferențiar	Realizat
A2 - Activitatea de cercetare	300	599.72
A2.1 - Articole în reviste cotate și în volumele unor manifestări științifice indexate ISI proceedings	6 (din care minimum 1 în reviste cotate ISI Q1 sau Q2 [10]/[11])	20 (8 în Q1-Q2)
A2.4.1 - Granturi/proiecte câștigate prin competiție (Director/responsabil)	1	2

FI cumulat pentru publicatii 65.2:

- reviste cotate ISI: 59.458;
- brevete: 3.0 (6 brevete x 0.5 FI echivalent).;
- volumele conferințelor ISI: 2.75 (11 lucrări x 0.25 FI echivalent).

Note:

[3] Se consideră factorul de impact ISI al revistei valabil în anul publicării sau la data depunerii dosarului. Pentru volumele manifestărilor ISI se consideră factorul de impact echivalent 0,25. Pentru volumele conferințelor internaționale de top în domeniul de abilitare, se consideră factorul de impact echivalent 0,75 (lista acestora, agreată și ținută la zi de comisia CNATDCU nr. 15, fiind disponibilă la adresa www.cnatdca-c15.org).

[4] Pentru domeniul Calculatoare, Tehnologia Informației și Ingineria Sistemelor sunt recunoscute următoarele baze de date internaționale (BDI): ISI, Scopus, IEEE (Institute of Electrical and Electronics Engineers) Xplore, Science Direct, Elsevier, Springerlink, ACM (Association for Computing Machinery) DBLP, EURASIP, Wiley, Inspec.

[5] Se dublează punctajul dacă rezultatul este înregistrat la WIPO, EPO, USPTO, JPO.

[6] Nu se consideră în această categorie proiecte/granturi care nu prezintă un caracter predominant de cercetare. Se consideră numai proiecte/granturi relevante pentru profilul postului scos la concurs/domeniul de abilitare. Candidatul va atașa documente care să demonstreze caracterul de cercetare al proiectului.

[10] Revistă cotate ISI aflată printre primele 50% în cadrul subdomeniului (sau al unuia dintre subdomeniile) de acreditare ISI din punct de vedere al factorului de impact (zonele Q1-Q2 în notația ISI). Situația revistelor în top 25-50% (Q1, Q2) se consideră fie la momentul publicării, fie la data înscrierii la concurs. Una și numai una dintre lucrările necesare poate fi echivalată cu: (un brevet de invenție indexat WOS-Derwent) sau (1 articol în conferințe internaționale de top în domeniul de abilitare, lista acestora agreată și ținută la zi de comisia CNATDCU nr. 15 fiind disponibilă la adresa www.cnatdca-c15.org).

[11] identică cu [10].

[13] Pentru brevete se consideră factorul de impact echivalent 0,5, pentru celelalte publicații factorul de impact se calculează conform notei de subsol 3.

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A3. Recunoașterea și impactul activității

A3.1. Citări [7] în cărți, reviste și volume ale unor manifestări științifice

A3.1.1. Cărți, ISI [8] (8/16 pct. / nr. autori art. citat)

Nr. crt.	Lucrarea citată
1	<p>Vizitiu, A., Niță, C.I., Puiu, A., Suciuc, C., Itu, L.M., <i>Applying Deep Neural Networks Over Homomorphic Encrypted Medical Data</i>, Computational and Mathematical Methods in Medicine, Hindawi, 2020; Vol. 2020, DOI: 10.1155/2020/3910250. Link lista citări: https://scholar.google.com/scholar?oi=bibs&hl=ro&cites=1956591311644038965</p>
	Citări
1.1	<p>Rahman, M.A., Hossain, M.S., Islam, M.S., Alrajeh, N.A., Muhammad, G., <i>Secure and Provenance Enhanced Internet of Health Things Framework: A Blockchain Managed Federated Learning Approach</i>, IEEE Access, 2020; Vol. 8, pp. 205071-205087. https://ieeexplore.ieee.org/abstract/document/9311140 [Q1-Q2]</p>
1.2	<p>Alshehri, F., Muhammad, G., <i>A Comprehensive Survey of the Internet of Things (IoT) and AI-Based Smart Healthcare</i>, IEEE Access, 2021; Vol. 9, pp. 3660-3678. https://ieeexplore.ieee.org/abstract/document/9311140 [Q1-Q2]</p>
1.3	<p>Rahman, A., Hossain, M.S., Showail, A.J., Alrajeh, N.A., Alhamid, M.F., <i>A secure, private, and explainable IoT framework to support sustainable health monitoring in a smart city</i>, Sustainable Cities and Society, 2021; Vol. 72, pp. 103083. https://www.sciencedirect.com/science/article/abs/pii/S221067072100367X [Q1-Q2]</p>
1.4	<p>Khalid, N., Qayyum, A., Bilal, M., Al-Fuqaha, A.I., Qadir, J., <i>Privacy-preserving artificial intelligence in healthcare: Techniques and applications</i>, Computers in biology and medicine, 2023; Vol. 158, pp. 106848. https://www.sciencedirect.com/science/article/pii/S001048252300313X [Q1-Q2]</p>
1.5	<p>Younis, M.F., Lalouani, W., Lasla, N., Emokpa, L.E., Abdallah, M.M., <i>Blockchain-Enabled and Data-Driven Smart Healthcare Solution for Secure and Privacy-Preserving Data Access</i>. IEEE Systems Journal, 2022; Vol. 16, pp. 3746-3757. https://ieeexplore.ieee.org/abstract/document/9481317 [Q1-Q2]</p>
1.6	<p>Zhang, J., Jiang, Z.L., Li, P., & Yiu, S., <i>Privacy-preserving multikey computing framework for encrypted data in the cloud</i>, Information Sciences, 2021; Vol. 575, pp. 217-230. https://www.sciencedirect.com/science/article/abs/pii/S0020025521006083 [Q1-Q2]</p>
1.7	<p>Liu, J., Chen, C., Qu, Y., Yang, S., Xu, L., <i>RASS: Enabling privacy-preserving and authentication in online AI-driven healthcare applications</i>, ISA transactions, 2023; Vol. 141, pp. 20-29. https://www.sciencedirect.com/science/article/abs/pii/S0019057823001672 [Q1-Q2]</p>
1.8	<p>Sana, M.U., Li, Z., Javaid, F., Liaqat, H.B., Ali, M.U., <i>Enhanced Security in Cloud Computing Using Neural Network and Encryption</i>, IEEE Access, 2021; Vol. 9, pp. 145785-145799. https://ieeexplore.ieee.org/abstract/document/9585614 [Q1-Q2]</p>

8 citări x 16 pct. / 5 autori = 25.60 pct.

2	Vizitiu, A., Niță, C.I., Puiu, A., Suciuc, C., Itu, L.M., <i>Towards Privacy-Preserving Deep Learning based Medical Imaging Applications</i> , 14th IEEE Inter. Symp. on Medical Measurements and Applications, Istanbul, Turkey, June 26-28, 2019, pp. 1-6, DOI: 10.1109/MeMeA.2019.8802193. Link listă citări: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=8196487398559845369
Citări	
2.1	Rajput, A.S., & Tiwari, S., <i>A Review on Privacy Preserving Using Machine learning and Deep Learning Techniques</i> , International Journal for Research in Applied Science and Engineering Technology, 2020; Vol. 384, pp. 21-45. https://www.sciencedirect.com/science/article/abs/pii/S0925231219316431 [Q1-Q2]
2.2	Son, Y., Han, K., Lee, Y.S., Yu, J., Im, Y., Shin, S., <i>Privacy-preserving breast cancer recurrence prediction based on homomorphic encryption and secure two party computation</i> , PLoS ONE, 2021; Vol. 16. https://journals.plos.org/plosone/article/metrics?id=10.1371/journal.pone.0260681 [Q1-Q2]
2.3	Pan, K., Gong, M., Feng, K., Wang, K., <i>Differentially private regression analysis with dynamic privacy allocation</i> , Knowledge-Based Systems, 2021; Vol. 217, pp. 106795. https://www.sciencedirect.com/science/article/abs/pii/S0950705121000587 [Q1-Q2]
2.4	Boulemtafes, A., Derhab, A., Challal, Y., <i>PRIViLY: Private Remote Inference over fully connected deep networks for pervasive health monitoring with constrained client-side</i> , Journal of Information Security and Applications, 2023; Vol. 77, pp. 103552. https://www.sciencedirect.com/science/article/abs/pii/S2214212623001369 [Q1-Q2]
2.5	Tran, A.T., Luong, T., Huynh, V., <i>A comprehensive survey and taxonomy on privacy-preserving deep learning</i> , Neurocomputing, 2024; Vol. 576, pp. 127345. https://www.sciencedirect.com/science/article/abs/pii/S0925231224001164 [Q1-Q2]
2.6	Jeong, O., Moon, I., <i>Adaptive transfer learning-based cryptanalysis on double random phase encoding</i> , Optics & Laser Technology, 2024; Vol.168, pp. 109916. https://www.sciencedirect.com/science/article/pii/S0030399223008095 [Q1-Q2]
6 citări x 16 pct. / 5 autori = 19.20 pct.	

3	Popescu, A.B., Taca, I.A., Nita, C.I., Vizitiu, A. , Demeter, R., Suciuc, C., Itu, L.M. <i>Privacy Preserving Classification of EEG Data Using Machine Learning and Homomorphic Encryption</i> . Applied Sciences. 2021; Vol. 11(16):7360, DOI: 10.3390/app11167360. Link listă citări: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=7965608343045679451
Citări	
3.1	Salankar, N., Qaisar, S.M., Plawiak, P., Tadeusiewicz, R., Hammad, M., <i>EEG based alcoholism detection by oscillatory modes decomposition second order difference plots and machine learning</i> . Biocybernetics and Biomedical Engineering, 2022; Vol. 42, pp. 173-186. https://www.sciencedirect.com/science/article/abs/pii/S0208521621001479 [Q1-Q2]
3.2	Wen, D., Jiao, W., Li, X., Wan, X., Zhou, Y., Dong, X., Lan, X., Han, W., <i>The EEG signals encryption algorithm with K-sine-transform-based coupling chaotic system</i> . Information Sciences, 2022; Vol. 622, pp. 962-984. https://www.sciencedirect.com/science/article/abs/pii/S002002552201492X [Q1-Q2]
3.3	Jiang, X., Fan, J., Zhu, Z., Wang, Z., Guo, Y., Liu, X., Jia, F., Dai, C., <i>Cybersecurity in neural interfaces: Survey and future trends</i> . Computers in biology and medicine, 2023; Vol. 167, pp. 107604.

	https://www.sciencedirect.com/science/article/abs/pii/S0010482523010697 [Q1-Q2]
3.4	Deng, G., Tang, M., Zhang, Y., Huang, Y., Duan, X., <i>Privacy-Preserving Outsourced Artificial Neural Network Training for Secure Image Classification</i> . Applied Sciences, 2023; Vol 12, pp. 12873. https://www.mdpi.com/2076-3417/12/24/12873 [Q1-Q2]
3.5	Kovari, A., <i>Research Directions of Applied Cognitive Sciences</i> . Applied Sciences, 2023; Vol 12, pp. 5789. https://www.mdpi.com/2076-3417/12/12/5789 [Q1-Q2]
5 citări x 16 pct. / 7 autori = 11.42 pct.	

4	Popescu, A.B., Taca, I.A., Vizitiu, A. , Nita, C.I., Suciuc, C., Itu, L.M., Scafa-Udriște, A. <i>Obfuscation Algorithm for Privacy-Preserving Deep Learning-Based Medical Image Analysis</i> . Applied Sciences, 2022; Vol. 12(8): 3997, DOI: 10.3390/app12083997. Link listă citări: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=8878231351975692138
Citări	
4.1	Sirisha, U., Chandana, B.S., <i>Privacy Preserving Image Encryption with Optimal Deep Transfer Learning Based Accident Severity Classification Model</i> . Sensors 2023; Vol. 23, pp. 519. https://www.mdpi.com/1424-8220/23/1/519 [Q1-Q2]
4.2	Shiri, I., Razeghi, B., Ferdowsi, S., Salimi, Y., Gündüz, D., Teodoro, D., Voloshynovskiy, S., Zaidi, H., <i>PRIMIS: Privacy-preserving medical image sharing via deep sparsifying transform learning with obfuscation</i> . Journal of biomedical informatics, 2024; Vol. 150, pp. 104583. https://www.sciencedirect.com/science/article/abs/pii/S1532046424000017 [Q1-Q2]
4.3	Alslman, Y.S., Alnagi, E., Ahmad, A., AbuHour, Y., Younis, R., Abu Al-haija, Q., <i>Hybrid Encryption Scheme for Medical Imaging Using AutoEncoder and Advanced Encryption Standard</i> , Electronics, 2023; Vol. 11(23), pp. 3967. https://www.mdpi.com/2079-9292/11/23/3967 [Q1-Q2]
4.4	Prabhavathi, K., Anandaraju, M.B., Kiran, P., <i>An efficient medical image encryption algorithm for telemedicine applications</i> . Microprocess. Microsystems, 2023; Vol. 101, pp. 104907. https://www.sciencedirect.com/science/article/abs/pii/S0141933123001515 [Q1-Q2]
4 citări x 16 pct. / 4 autori = 16.00 pct.	

5	Vizitiu, A. , Itu, L.M., Nita, C., Suciuc, C. <i>Optimized three-dimensional stencil computation on Fermi and Kepler GPUs</i> . 2014 IEEE High Performance Extreme Computing Conference (HPEC), Avenue Waltham, MA, September 11-14, 2014, pp. 1-6, DOI: 10.1109/HPEC.2014.7040968. Link listă citări: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=4342088436710668134
Citări	
5.1	Anjum, O., Almasri, M., Gonzalo, S.G., & Hwu, W.W., <i>An efficient GPU implementation and scaling for higher-order 3D stencils</i> . Information Sciences, 2022; Vol. 586, pp. 326-343. https://www.sciencedirect.com/science/article/abs/pii/S0020025521011646 [Q1-Q2]
5.2	Pekkilä, J., Väisälä, M.S., Käpylä, M.J., Käpylä, P.J., Anjum, O., <i>Methods for compressible fluid simulation on GPUs using high-order finite differences</i> , Computer Physics Communications, 2017; Vol. 217, pp. 11-22. https://www.sciencedirect.com/science/article/abs/pii/S001046551730098X [Q1-Q2]
5.3	Xu, Q., Li, R., Xu, M., <i>High-performance Implementation of Parallel Semi-Implicit Method for Pressure Linked Equations Solver on CPU+GPU Platform</i> , International Journal of Heat and Mass

	Transfer, 2022; Vol. 182, pp. 121976. https://www.sciencedirect.com/science/article/abs/pii/S0017931021010814 [Q1-Q2]
5.4	Stosic, D., Stosic, D., Ludermir, T.B., Stosic, B.D., Milošević, M.V., <i>GPU-advanced 3D electromagnetic simulations of superconductors in the Ginzburg-Landau formalism</i> . Journal of Computational Physics, 2016; Vol. 322, 183-198. https://www.sciencedirect.com/science/article/abs/pii/S0021999116302650 [Q1-Q2]
4 citări x 16 pct. / 4 autori = 16.00 pct.	

6	Puiu, A., Vizitiu, A. , Nita, C., Itu, L., Sharma, P., Comaniciu, D. <i>Privacy-Preserving and Explainable AI for Cardiovascular Imaging</i> . Studies in informatics and control. 2021; Vol. 30, pp. 21-32, DOI: 10.24846/v30i2y202102. Link listă citări: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=13348763753869023468
Citări	
6.1	Ivanescu, R. C., Belciug, S., Nascu, A., Serbanescu, M. S., Iliescu, D. G., <i>Evolutionary computation paradigm to determine deep neural networks architectures</i> . International Journal Of Computers Communications & Control 2022; Vol. 17(5). https://univagora.ro/jour/index.php/ijccc/article/view/4886
6.2	Vainio-Pekka, H., Agbese, M. O. O., Jantunen, M., Vakkuri, V., Mikkonen, T., Rousi, R., Abrahamsson, P., <i>The Role of Explainable AI in the Research Field of AI Ethics</i> . ACM Transactions on Interactive Intelligent Systems, 2023; Vol 13(4), pp. 1-39. https://dl.acm.org/doi/full/10.1145/3599974
6.3	Georgara, A., Rodríguez-Aguilar, J. A., Sierra, C., <i>Privacy-Aware Explanations for Team Formation</i> . In International Conference on Principles and Practice of Multi-Agent Systems, 2022, pp. 543-552, Cham: Springer International Publishing. https://link.springer.com/chapter/10.1007/978-3-031-21203-1_32
6.4	Hatfaludi, C.A., Danu, M.D., Leonte, H.A., Popescu, A.B., Condrea, F., Aldea, G.D., Sandu, A.E., Leordeanu, M., Suci, C., Rodean, I.P. Itu, L.M., <i>Applications of Artificial Intelligence in Cardiovascular Emergencies–Status Quo and Outlook</i> . Journal of Cardiovascular Emergencies, 2023; Vol 9(4), pp. 83-102. https://sciendo.com/article/10.2478/jce-2023-0019
6.5	Rufai, A. T., Rufai, A. U., & Imoize, A. L., <i>Application of AIoMT in Medical Robotics</i> . In Handbook of Security and Privacy of AI-Enabled Healthcare Systems and Internet of Medical Things, 2024, pp. 335-364, CRC Press. https://www.taylorfrancis.com/chapters/edit/10.1201/9781003370321-14/application-aiomt-medical-robotics-aishat-titilola-rufai-adewole-usman-rufai-agbotiname-lucky-imoize
5 citări x 8 pct. / 6 autori = 6.66 pct.	

7	Danu, M.D, Niță, C.I., Vizitiu, A. , Suci, C., Itu, L. <i>Deep Learning based Generation of Synthetic Blood Vessel Surfaces</i> , 23rd Inter. Conf. on System Theory, Control and Computing, Sinaia, Romania, October 9-11, 2019, pp. 662-667, DOI: 10.1109/icstcc.2019.8885576. Link listă citări: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=8614609800456936551
Citări	
7.1	Chen, Y., Yang, X.H., Wei, Z., Heidari, A.A., Zheng, N., Li, Z., Chen, H., Hu, H., Zhou, Q. Guan, Q., <i>Generative adversarial networks in medical image augmentation: A review</i> . Computers in Biology and Medicine, 2022; Vol. 144, pp. 105382. https://www.sciencedirect.com/science/article/abs/pii/S0010482522001743 [Q1-Q2]
7.2	Bisighini, B., Aguirre, M., Biancolini, M.E., Trovalusci, F., Perrin, D., Avril, S. Pierrat, B., <i>Machine learning and reduced order modelling for the simulation of braided stent deployment</i> . Frontiers in physiology, 2023; Vol. 14, pp. 508. https://pubmed.ncbi.nlm.nih.gov/37064913

	[Q1-Q2]
7.3	Ferreira, A., Li, J., Pomykala, K.L., Kleesiek, J., Alves, V., Egger, J., <i>GAN-based generation of realistic 3D data: A systematic review and taxonomy</i> . Medical Image Analysis, 2024; Vol. 93, pp. 103100. https://www.sciencedirect.com/science/article/pii/S1361841524000252
	[Q1-Q2]
7.4	Kalaie, S., Bulpitt, A.J., Frangi, A.F. and Gooya, A., <i>A Geometric Deep Learning Framework for Generation of Virtual Left Ventricles as Graphs</i> . In Medical Imaging with Deep Learning, 2024, pp. 426-443, PMLR. https://openreview.net/pdf?id=Ao0D2HMB8P
1 citare x 8 pct. / 5 autori + 3 citări x 16 pct. / 5 autori = 11.20 pct.	

Total A3.1.1 : 106.08 puncte (36 citări)

A3.1.2. BDI [4] (4 pct. / nr. autori art. citat)

Nr. crt.	Lucrarea citată
1	Ciușdel, C., Vizitiu, A., Moldoveanu, F., Suciuc, C., Itu, L.M., <i>Towards Real Time Deep Learning based Estimation of Fracture Risk in Osteoporosis Patients</i> , 40th Inter. Conf. on Telecommunications and Signal Processing, Barcelona, Spain, July 5-7, 2017, pp. 68-73, DOI: 10.1109/TSP.2017.8076069. Link listă citări: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=16457625995667902749
	Citări
1.1	Shetty, S., Shetty, S., Masurekar, A., Sarbhukan, V., Pawar, R., <i>Neural Network-Based Model for Osteoporosis Prediction: A Novel Approach for Enhanced Accuracy</i> , 2023 14th International Conference on Computing Communication and Networking Technologies (ICCCNT), July 6, 2023, pp 1-6. https://ieeexplore.ieee.org/abstract/document/10308187
1.2	Li, W., Xu, J., Zhang, S., Guo, H., Sun, J., Wang, Y., Zhao, J., <i>Study and Prediction of Bone Strength of Osteoporosis Model Based on Synchrotron Radiation</i> , Research Square 202, DOI: 10.21203/rs.3.rs-900512/v. https://europepmc.org/article/ppr/ppr397556
2 citări x 4 pct. / 5 autori = 1.60 pct.	
2	Vizitiu, A., Mohaiu, A.T., Popdan, I.M., Balachandran, A., Ghesu, F.C., Comaniciu, D. <i>Multi-scale Self-Supervised Learning for Longitudinal Lesion Tracking with Optional Supervision</i> . International Conference on Medical Image Computing and Computer-Assisted Intervention Vancouver, BC, Canada, October 8–12, 2023, Proceedings, Part I, DOI: 10.1007/978-3-031-43907-0. Link listă citări: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=3923553058117436078
	Citări
2.1	Bai, X., Bai, F., Huo, X., Ge, J., Lu, J., Ye, X., Yan, K. and Xia, Y., <i>SAMv2: A Unified Framework for Learning Appearance, Semantic and Cross-Modality Anatomical Embeddings</i> . arXiv preprint arXiv:2311.15111, 2023. https://arxiv.org/abs/2311.15111
1 citare x 4 pct. / 6 autori = 0.66 pct.	

Total A3.1.2 : 2.26 puncte (3 citări)

Total A3.1 : 108.34 puncte (39 citări)

A3.2. Membru în colectivele de redacție sau comitete științifice al revistelor indexate ISI, chair, co-chair sau membru în comitetele de organizare ale manifestărilor științifice internaționale indexate ISI [9] (10 pct.)

A3.2. Membru în colectivele de redacție sau comitetele științifice ale revistelor indexate BDI, chair, co-chair sau membru în comitetele de organizare ale manifestărilor științifice internaționale indexate BDI [9] (6 pct.)

A3.4. Premii în domeniu conferite de Academia Română, ASTR, AOSR, sau premii internaționale de prestigiu (15 pct.)

Nr. crt.	Premiu
1	Best Paper Award for Ph.D. Students, IEEE International Conference on System Theory, Control and Computing - ICSTCC conference, 2019.
2	Best Poster Award, Machine Learning Summer School Conference organized by Google DeepMind, 2018.
3	Innovation Radar Prize awarded by the European Commission in the "Industrial Enabling Tech", 2019.
4	Best Team of Young Researchers awarded at the Romanian Research Gala, 2023.
4 premii x 15 pct. = 60 pct.	

Total A3 : 168.34 puncte

Indicator	Conditii minimale – Conferențiar	Realizat
A3 - Recunoașterea impactului activității	50	168.34
A3.1.1 - Număr de citări în cărți, reviste cotate ISI și volume ale unor manifestări științifice ISI (WOS) [11]	10	36

Note:

[4] Pentru domeniul Calculatoare, Tehnologia Informației și Ingineria Sistemelor sunt recunoscute următoarele baze de date internaționale (BDI): ISI, Scopus, IEEE (Institute of Electrical and Electronics Engineers) Xplore, Science Direct, Elsevier, Springerlink, ACM (Association for Computing Machinery), DBLP, EURASIP, Wiley, Inspec

[7] Se exclud autocitățile (auto-citarea se referă la situația în care numele candidatului apare simultan atât printre numele autorilor referinței bibliografice în cauză cât și printre numele autorilor articolului care citează, conform WOS https://images.webofknowledge.com/WOKRS523R4/help/WOS/hs_crsearch_self_citations.html)

[8] Se dublează punctajul dacă citarea provine dintr-o revistă cotate ISI aflată printre primele 50% în cadrul subdomeniului (sau al unuia dintre subdomeniile) de acreditare ISI din punct de vedere al factorului de impact (zonele Q1-Q2 în notația ISI).

[9] Nu se considera calitatea de recenzor al unor articole individuale.

[11] Lucrarea citată nu este obligatoriu să fie indexată WOS.

Șef lucr. dr. ing. Anamaria Vizitiu

