

Concurs pentru ocuparea postului de Asistent, poz. 31
 Facultatea de Finanțe, Asigurări, Bănci și Burse de Valori
 Departamentul Monedă și Bănci,
 Disciplinele: Modelarea deciziei financiar-monetare, Inginerie financiară
 Domeniul: Finanțe
 post publicat în Monitorul Oficial al României nr. 93 din 10.04.2025

LISTA DE LUCRĂRI

Candidat: Ivașcu D. Codruț-Florin - **Dr.**/din 2025

1. Lista celor maximum 10 lucrări considerate de candidat a fi cele mai relevante pentru realizările profesionale proprii, care sunt incluse în format electronic în dosar și care se pot regăsi și în celelalte categorii de lucrări din prezenta listă de lucrări:

Nr Crt	Autorii, Titlu articol/carte, Denumire revista/carte, volumul(numărul), paginile de încadrare, data apariției
1	Ivașcu, C. F. (2021). Option pricing using machine learning. <i>Expert Systems with Applications</i> , 163, 113799. DOI: 10.1016/j.eswa.2020.113799, ISSN: 0957-4174, WOS:000582115400017. https://www.sciencedirect.com/science/article/abs/pii/S0957417420306187
2	Ivașcu, C. F. (2022). Heuristic methods for stock selection and allocation in an index tracking problem. <i>Algorithmic Finance</i> , 9(3-4), 103-119, DOI: 10.3233/AF-200367, ISSN: 2158-5571, WOS:000837998600004. https://journals.sagepub.com/doi/abs/10.3233/AF-200367
3	Ivașcu, C. F. (2023). Understanding Dividend Puzzle Using Machine Learning. <i>Computational Economics</i> , 1-19., DOI: 10.1007/s10614-023-10439-7, ISSN: 0927-7099, WOS:001044313700001 https://link.springer.com/article/10.1007/s10614-023-10439-7
4	Ivașcu, C. F., & Ștefoni, S. E. (2023). Modelling the non-linear dependencies between government expenditures and shadow economy using data-driven approaches. <i>Scientific Annals of Economics and Business</i> , 70(1), 97-114. DOI: 10.47743/saeb-2023-0001, ISSN: 2501-1960, WOS:000966199800007 https://www.cceol.com/search/article-detail?id=1107160
5	IVAȘCU, C. F., & ȘERBAN, D. (2023). VALUE AT RISK ESTIMATION FOR NON-GAUSSIAN DISTRIBUTIONS. <i>Review of Finance & Banking</i> , 15(2). https://rfb.ase.ro/vol15-dec2023.asp
6	Șerban, D. & Ivașcu C. (2020) - Role of Capital Markets in The Post-Crisis Economic Recovery. <i>EDUCATION EXCELLENCE AND INNOVATION MANAGEMENT: A 2025 VISION TO SUSTAIN ECONOMIC DEVELOPMENT DURING GLOBAL CHALLENGES</i> https://ibima.org/accepted-paper/role-of-capital-markets-in-the-post-crisis-economic-recovery/

7	Ivașcu, C. (2023). Can Machine Learning Models Predict Inflation?. In Proceedings of the International Conference on Business Excellence (Vol. 17, No. 1, pp. 1748-1756).
---	---

2. Teza de doctorat

Nr. Crt.	Teză
T1	Ivașcu Codrut-Florin – Machine Learning aplicat în Finanțe – coordonator științific Prof. Univ. Dr. Bogdan Negrea, 2024 – Academia de Studii Economice din București, domeniu de doctorat Finanțe, 2024

3 Cărți de specialitate publicate în edituri recunoscute (Cb1, Cb2 etc.), **articole/studii** publicate in extenso în reviste de specialitate de circulație internațională recunoscute (reviste cotate ISI sau indexate în baze de date internaționale specifice domeniului) (Ri1, Ri2 etc.), **articole/studii in extenso** publicate în volumele unor manifestări științifice internaționale recunoscute din țară și din străinătate (cu ISSN/ ISBN) (Vi1, Vi2 etc.), precum și **alte lucrări similare**: articole/studii publicate in extenso în reviste de specialitate de circulație națională recunoscute CNCSIS (Rn1, Rn2 etc.), articole/studii publicate in extenso în volumele unor manifestări științifice naționale (cu ISSN/ISBN) (Vn1, Vn2 etc.), lucrări prezentate la diferite seminarii/expoziții, inovații etc. (E1, E2 etc.), după caz, prin care se aduc contribuții la dezvoltarea domeniului.

Nr Crt	Articole publicate în reviste cotate ISI
Ri1	Ivașcu, C. F. (2021). Option pricing using machine learning. <i>Expert Systems with Applications</i> , 163, 113799. DOI: 10.1016/j.eswa.2020.113799, ISSN: 0957-4174, WOS:000582115400017. https://www.sciencedirect.com/science/article/abs/pii/S0957417420306187
Ri2	Ivașcu, C. F. (2022). Heuristic methods for stock selection and allocation in an index tracking problem. <i>Algorithmic Finance</i> , 9(3-4), 103-119, DOI: 10.3233/AF-200367, ISSN: 2158-5571, WOS:000837998600004. https://journals.sagepub.com/doi/abs/10.3233/AF-200367
Ri3	Ivașcu, C. F. (2023). Understanding Dividend Puzzle Using Machine Learning. <i>Computational Economics</i> , 1-19., DOI: 10.1007/s10614-023-10439-7, ISSN: 0927-7099, WOS:001044313700001 https://link.springer.com/article/10.1007/s10614-023-10439-7
Ri4	Ivașcu, C. F., & Ștefoni, S. E. (2023). Modelling the non-linear dependencies between government expenditures and shadow economy using data-driven approaches. <i>Scientific Annals of Economics and Business</i> , 70(1), 97-114. DOI: 10.47743/saeb-2023-0001, ISSN: 2501-1960, WOS:000966199800007 https://www.cceol.com/search/article-detail?id=1107160

Nr Crt	Articole publicate în reviste indexate BDI
Ri5	IVAȘCU, C. F., & ȘERBAN, D. (2023). VALUE AT RISK ESTIMATION FOR NON-GAUSSIAN DISTRIBUTIONS. <i>Review of Finance & Banking</i> , 15(2). https://rfb.ase.ro/vol15-dec2023.asp

Nr Crt	Articole/studii publicate în volumele conferințelor
Vi1	Șerban, D. & Ivașcu C. (2020) - Role of Capital Markets in The Post-Crisis Economic Recovery. <i>EDUCATION EXCELLENCE AND INNOVATION MANAGEMENT: A 2025 VISION TO SUSTAIN ECONOMIC DEVELOPMENT DURING GLOBAL CHALLENGES</i> https://ibima.org/accepted-paper/role-of-capital-markets-in-the-post-crisis-economic-recovery/
Vi2	Ivașcu, C. (2023). Can Machine Learning Models Predict Inflation?. In Proceedings of the International Conference on Business Excellence (Vol. 17, No. 1, pp. 1748-1756).

5. Citări ale lucrărilor publicate (doar citările in reviste cotate ISI cu AIS nenul conform Clarivate)

Nr. Crt.	Citări în reviste ISI
Ri1	Yan, Zhongzhen; Chen, Hao; Dong, Xinhua; Zhou, Kewei; Xu, Zhigang (2022). Research on prediction of multi-class theft crimes by an optimized decomposition and fusion method based on XGBoost. *EXPERT SYSTEMS WITH APPLICATIONS*, 207.0, . 10.1016/j.eswa.2022.117943
	Liang, Longyue; Cai, Xuanye (2022). Time-sequencing European options and pricing with deep learning - Analyzing based on interpretable ALE method. *EXPERT SYSTEMS WITH APPLICATIONS*, 187.0, . 10.1016/j.eswa.2021.115951
	Yi, Ziwei; Cao, Xinwei; Chen, Zuyan; Li, Shuai (2023). Artificial Intelligence in Accounting and Finance: Challenges and Opportunities. *IEEE ACCESS*, 11.0, 129100-129123. 10.1109/ACCESS.2023.3333389
	Sheng, Yankai; Ma, Ding (2022). Stock Index Spot-Futures Arbitrage Prediction Using Machine Learning Models. *ENTROPY*, 24.0(10), . 10.3390/e24101462
	Iltuzer, Zeynep (2022). Option pricing with neural networks vs. Black-Scholes under different volatility forecasting approaches for BIST 30 index options. *BORSA ISTANBUL REVIEW*, 22.0(4), 725-742. 10.1016/j.bir.2021.12.001
	Brini, Alessio; Lenz, Jimmie (2024). Pricing cryptocurrency options with machine learning regression for handling market volatility. *ECONOMIC MODELLING*, 136.0, . 10.1016/j.econmod.2024.106752
	Ivascu, Codrut Florin; Stefoni, Sorina Emanuela (2023). Modelling the Non-Linear Dependencies between Government Expenditures and Shadow Economy Using Data-Driven Approaches. *SCIENTIFIC ANNALS OF ECONOMICS AND BUSINESS*, 70.0(1), 97-114. 10.47743/saeb-2023-0001
	Liu, Yan; Zhang, Xiong (2023). Option Pricing Using LSTM: A Perspective of Realized Skewness. *MATHEMATICS*, 11.0(2), . 10.3390/math11020314
	Zouaoui, Habib; Naas, Meryem-Nadjat (2023). Option pricing using deep learning approach based on LSTM-GRU neural networks: Case of London stock exchange. *DATA SCIENCE IN FINANCE AND ECONOMICS*, 3.0(3), 267-284. 10.3934/DSFE.2023016
	Cho, Junhyun; Kim, Yejin; Lee, Sungchul (2022). An accurate and stable numerical method for option hedge parameters. *APPLIED MATHEMATICS AND COMPUTATION*, 430.0, . 10.1016/j.amc.2022.127276
	Sharma, Akanksha; Verma, Chandan Kumar; Singh, Priya (2024). Enhancing Option Pricing Accuracy in the Indian Market: A CNN-BiLSTM Approach. *COMPUTATIONAL ECONOMICS*, . 10.1007/s10614-024-10689-z
	Shvimer, Yossi; Zhu, Song-Ping (2024). Pricing options with a new hybrid neural network model. *EXPERT SYSTEMS WITH APPLICATIONS*, 251.0, . 10.1016/j.eswa.2024.123979
	Qiu, Zhiguo; Lazar, Emese; Nakata, Keiichi (2024). VaR and ES forecasting via recurrent neural network-based stateful models. *INTERNATIONAL REVIEW OF FINANCIAL ANALYSIS*, 92.0, . 10.1016/j.irfa.2024.103102
	Bastos, Joao A. (2024). Conformal prediction of option prices. *EXPERT SYSTEMS WITH APPLICATIONS*, 245.0, . 10.1016/j.eswa.2023.123087
	Cao, Peiwei; He, Xubiao (2024). Machine Learning Solutions for Fast Real Estate Derivatives Pricing. *COMPUTATIONAL ECONOMICS*, 64.0(4), 2003-2032. 10.1007/s10614-023-10506-z

	Baldwin, Kenneth; Alhalboni, Maryam (2023). A value-based measure of market power for the participatory deposits of Islamic banks. *JOURNAL OF INTERNATIONAL FINANCIAL MARKETS INSTITUTIONS & MONEY*, 87.0, . 10.1016/j.intfin.2023.101809
	Wang, Miao; Zhang, Yunfeng; Qin, Chao; Liu, Peipei; Zhang, Qiuyue (2022). Option Pricing Model Combining Ensemble Learning Methods and Network Learning Structure. *MATHEMATICAL PROBLEMS IN ENGINEERING*, 2022.0, . 10.1155/2022/2590940
	Toraubally, Waseem A. (2022). Price dispersion and vanilla options in a financial market game. *FINANCE RESEARCH LETTERS*, 50.0, . 10.1016/j.frl.2022.103305
	Xu, Chang; Li, Bo; Zhang, Lingxian (2022). Soybean price forecasting based on Lasso and regularized asymmetric v-TSVR. *JOURNAL OF INTELLIGENT & FUZZY SYSTEMS*, 43.0(4), 4859-4872. 10.3233/JIFS-212525
	Zhang, Yilun; Song, Yuping; Peng, Ying; Wang, Hanchao (2024). Volatility forecasting incorporating intraday positive and negative jumps based on deep learning model. *JOURNAL OF FORECASTING*, 43.0(7), 2749-2765. 10.1002/for.3146
	Guo, Jingjun; Kang, Weiyi; Wang, Yubing (2024). Multi-perspective option price forecasting combining parametric and non-parametric pricing models with a new dynamic ensemble framework. *TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE*, 204.0, . 10.1016/j.techfore.2024.123429
	Luo, Qiang; Jia, Zhaoli; Li, Hongbo; Wu, Yongxin (2022). Analysis of parametric and non-parametric option pricing models. *HELIYON*, 8.0(11), . 10.1016/j.heliyon.2022.e11388
	Yang, Zheng; Zhang, Liqin; Tao, Xiangxing; Ji, Yanting (2022). Heston-GA Hybrid Option Pricing Model Based on ResNet50. *DISCRETE DYNAMICS IN NATURE AND SOCIETY*, 2022.0, . 10.1155/2022/7274598
	Dammak, Wael; Ben Mrad, Ali; de Peretti, Christian; Ben Hamad, Salah (2025). Enhancing Currency Option Pricing Models: Incorporating Dynamic Information Costs and Machine Learning Techniques. *COMPUTATIONAL ECONOMICS*, . 10.1007/s10614-025-10939-8
	Sapna, S.; Mohan, Biju R. (2025). A Synergetic Approach to Ethereum Option Valuation Using XGBoost and Soft Reordering 1D Convolutional Neural Networks. *COMPUTATIONAL ECONOMICS*, . 10.1007/s10614-025-10972-7
	Vinje, Jacob; Rygg, Erlend Stegavik; Wu, Cassandra; Risstad, Morten; Pimentel, Rita; Westgaard, Sjur; Ewald, Christian O. (2025). Merged LSTM-MLP for option valuation. *QUANTITATIVE FINANCE*, . 10.1080/14697688.2025.2493965
	Sun, Qiguo; Huang, Hanyue; Yang, Xibei; Zhang, Yuwei (2025). Stochastic jump diffusion process informed neural networks for accurate American option pricing under data scarcity. *APPLIED SOFT COMPUTING*, 176.0, . 10.1016/j.asoc.2025.113164
	Kim, Donghyun; Huh, Jeonggyu; Yoon, Ji-Hun (2025). Improved accuracy of an analytical approximation for option pricing under stochastic volatility models using deep learning techniques. *COMPUTERS & MATHEMATICS WITH APPLICATIONS*, 187.0, 150-165. 10.1016/j.camwa.2025.03.029
	Lv, Jian; Wang, Chenxu; Yuan, Wenyong; Zhang, Zhenyi (2024). The Study on Option Pricing Based on Wiener-Itô Chaos Expansion and Generative Adversarial Networks. *COMPUTATIONAL ECONOMICS*, . 10.1007/s10614-024-10802-2
	Kim, Sojin; Kim, Jimin; Song, Jongwoo (2024). Option pricing and profitability: A comprehensive examination of machine learning, Black-Scholes, and Monte Carlo method. *COMMUNICATIONS FOR STATISTICAL APPLICATIONS AND METHODS*, 31.0(5), . 10.29220/CSAM.2024.31.5.585
	Chen, Min-Kuan; Yang, Dong-Yuh; Hsieh, Ming-Hua; Wu, Mu-En (2024). An intelligent option trading system based on heatmap analysis via PON/POD yields. *EXPERT SYSTEMS WITH APPLICATIONS*, 257.0, . 10.1016/j.eswa.2024.124948
	Turkolmez, Gokce Baysal; El Hathat, Zakaria; Subramanian, Nachiappan; Kuppusamy, Saravanan; Sreedharan, V. Raja (2024). Machine Learning Algorithms for Pricing End-of-Life Remanufactured Laptops. *INFORMATION SYSTEMS FRONTIERS*, . 10.1007/s10796-024-10515-9
	Tam, Phan Huy; Yen, Nguyen Thi Hai; Tu, Nguyen Minh; Phuong, Do Thi Lan; Thanh, Nguyen Thuy Hong; Loc, Le Nguyen Phu; Anh, Pham Thi Kim (2024). Predicting Warrant Prices Using an Artificial Neural Network Model: Experimental Comparison with Black Scholes Metron Model. *ELECTRONIC JOURNAL OF APPLIED STATISTICAL ANALYSIS*, 17.0(1), . 10.1285/i20705948v17n1p89
	Ivascu, Codrut-Florin (2024). Understanding Dividend Puzzle Using Machine Learning. *COMPUTATIONAL ECONOMICS*, 64.0(1), 161-179. 10.1007/s10614-023-10439-7
	Luo, Xiankang; Chen, Tao (2021). Estimation of the Bid-Ask Prices for the European Discrete Geometric Average and Arithmetic Average Asian Options. *DISCRETE DYNAMICS IN NATURE AND SOCIETY*, 2021.0, . 10.1155/2021/9979285
	Xu, C., Li, B., & Zhang, L. (2022). Soybean price forecasting based on Lasso and regularized asymmetric v-TSVR. <i>Journal of Intelligent & Fuzzy Systems</i> , 43(4), 4859-4872.

	Paredes, M. S., & Kadry, S. (2022, March). Pricing european options with deep learning models. In <i>2022 Fifth International Conference of Women in Data Science at Prince Sultan University (WiDS PSU)</i> (pp. 106-111). IEEE.
	Sun, Q., Huang, H., Yang, X., & Zhang, Y. (2024). Jump Diffusion-Informed Neural Networks with Transfer Learning for Accurate American Option Pricing under Data Scarcity. <i>arXiv preprint arXiv:2409.18168</i> .
	Ivaşcu, C. F. (2024). Understanding Dividend Puzzle Using Machine Learning. <i>Computational Economics</i> , 64(1), 161-179.
	Arif, E., Suherman, S., & Widodo, A. P. (2024, August). Bibliometric Analysis of Trends and Directions in Machine Learning Applied to FinTech. In <i>2024 4th International Conference on Electronic and Electrical Engineering and Intelligent System (ICE3IS)</i> (pp. 379-384). IEEE.
	Bolfake, A., Mousavi, S. N., & Mashayekhi, S. (2023). Deep learning for option pricing under Heston and Bates models. <i>Journal of Mathematics and Modeling in Finance</i> , 3(1), 67-82.
	Pawar, A. A., & Chaudhary, D. (2024, November). Can GPT Price Options?. In <i>2024 IEEE International Conference on Future Machine Learning and Data Science (FMLDS)</i> (pp. 364-370). IEEE.
	Yang, Z., Zhang, L., Tao, X., & Ji, Y. (2022). Heston-GA Hybrid Option Pricing Model Based on ResNet50. <i>Discrete Dynamics in Nature and Society</i> , 2022(1), 7274598.
	Wei, W., & Zheng, J. (2024, October). Option Data Fusion Incorporating Moment-Matching and Dynamic-Matching Simulations. In <i>2024 IEEE International Conference on e-Business Engineering (ICEBE)</i> (pp. 106-111). IEEE.
	Maitra, S., & Arora, K. (2024, May). American Options: A Fractional-Order Black-Scholes Merton Approach with Neural Network. In <i>2024 2nd International Conference on Advancement in Computation & Computer Technologies (InCACCT)</i> (pp. 7-12). IEEE.
	Murwaningtyas, C. E., Haryono, W. S., Uge, M. A., & Kristofel, T. (2024). Perbandingan Metode Monte Carlo Antithetic Variate dan Control Variate dalam Penentuan Harga Opsi Barrier Knock-Out. <i>Euler: Jurnal Ilmiah Matematika, Sains dan Teknologi</i> , 12(1), 37-44.
	Vaswani, P., Mundakkad, P., & Jayaprakasam, K. (2022, October). Financial option pricing using random forest and artificial neural network: A novel approach. In <i>International joint conference on advances in computational intelligence</i> (pp. 419-433). Singapore: Springer Nature Singapore.
Ri2	Silva, J. C. S., & de Almeida Filho, A. T. (2024). A systematic literature review on solution approaches for the index tracking problem. <i>IMA Journal of Management Mathematics</i> , 35(2), 163-196.
Ri4	Felix, J., Alexandre, M., & Lima, G. T. (2024). Applying machine learning algorithms to predict the size of the informal economy. <i>Computational Economics</i> , 1-21.
	das Neves, J. C. G., & De Carvalho, V. O. (2025). The use of data mining in public budgeting: A systematic literature mapping. <i>IEEE Access</i> .
	Lazebnik, T. (2024). Going a Step Deeper Down the Rabbit Hole: Deep Learning Model to Measure the Size of the Unregistered Economy Activity. <i>Computational Economics</i> , 1-16.

Candidat,