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ΠΡΟΣΩΠΙΚΑ ΣΤΟΙΧΕΙΑ

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Εθνικότητα: Ελληνική
Οικογενειακή Κατάσταση: Άγαμος
Στρατιωτικές Υποχρεώσεις: Ολοκληρωμένες
Δίπλωμα οδήγησης: Α και Β κατηγορίας

ΣΠΟΥΔΕΣ

Μεταδιδακτορικός ερευνητής στο Τμήμα Οικονομικών Επιστημών του Εθνικού και Καποδιστριακού Πανεπιστημίου Αθηνών με τίτλο μεταδιδακτορικής έρευνας *"Fusion Optimization Algorithms and Artificial Intelligence Techniques for Financial Engineering Problems"*
2023 - Σήμερα

Διδακτορικό στα Οικονομικά του τμήματος Οικονομικών Επιστημών του Εθνικού και Καποδιστριακού Πανεπιστημίου Αθηνών με θέμα εκπόνησης διδακτορικής διατριβής *"Intelligent Online Optimization Algorithms for Portfolio Analysis and Management"*
2019 - 2023

Μεταπτυχιακό στα Εφαρμοσμένα Οικονομικά και Χρηματοοικονομικά με κατεύθυνση Μαθηματικά Χρηματοοικονομικά και Ανάλυση Κινδύνου του τμήματος Οικονομικών Επιστημών του Εθνικού και Καποδιστριακού Πανεπιστημίου Αθηνών
2017 - 2019

Πτυχίο Μαθηματικού με κατεύθυνση Πληροφορικής και Υπολογιστικών Μαθηματικών του Τμήματος Μαθηματικών της σχολής Θετικών Επιστημών του Πανεπιστημίου Πατρών
2006 - 2016

ΠΡΟΣΦΑΤΗ ΑΚΑΔΗΜΑΪΚΗ ΠΡΟΥΠΗΡΕΣΙΑ

Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών
Εξωτερικός Ακαδημαϊκός Συνεργάτης και Διδακτικό Προσωπικό
2018 – Σήμερα

- 4x Επιχορήγηση απόκτησης ακαδημαϊκής εμπειρίας σε νέους επιστήμονες
- 6x Επιχορήγηση άσκησης ερευνητικού έργου
- Επιχορήγηση κινητικότητας
- PhD Υποτροφία

Ελληνικό Ίδρυμα Έρευνας & Καινοτομίας
Επιστημονικά Υπεύθυνος
2025 – 2027

- Επιχορήγηση άσκησης ερευνητικού έργου

Siberian Federal University
Junior Researcher
2022 – 2024

- Επιχορήγηση άσκησης ερευνητικού έργου

ΑΚΑΔΗΜΑΪΚΗ ΔΙΔΑΚΤΙΚΗ ΕΜΠΕΙΡΙΑ

Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών
Τμήμα Οικονομικών Επιστημών

Μαθήματα:

- **Εφαρμοσμένη Επιχειρησιακή Έρευνα,** Προπτυχιακό Πρόγραμμα Σπουδών (ECON907), *2024 - Σήμερα*
- **Εργαστήριο Advanced Excel,** Πρόγραμμα Μεταπτυχιακών Σπουδών στη Ποσοτική Επενδυτική (ECON897), *2024 - Σήμερα*
- **Μαθηματικά Ι (φροντιστήριο),** Προπτυχιακό Πρόγραμμα Σπουδών (ECON299), *2023 - Σήμερα*
- **Τεχνικές Μαθηματικού Προγραμματισμού,** Προπτυχιακό Πρόγραμμα Σπουδών (ECON871), *2023 - Σήμερα*
- **Εργαστήριο MATLAB,** Πρόγραμμα Μεταπτυχιακών Σπουδών στη Ποσοτική Επενδυτική (ECON748), *2023 - Σήμερα*
- **Γραμμικά Μαθηματικά (Εργαστήριο),** Προπτυχιακό Πρόγραμμα Σπουδών (ECON325), *2019, 2021 - Σήμερα*
- **Σεμινάριο Ερευνητικών Μεθόδων,** Πρόγραμμα Μεταπτυχιακών Σπουδών στη Ποσοτική Επενδυτική (ECON829), *2023 - Σήμερα*
- **Εισαγωγή στην Επιστήμη των Η/Υ και Ανάλυση Δεδομένων (Εργαστήριο),** Προπτυχιακό Πρόγραμμα Σπουδών (ECON198), *2018 - 2019*

Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών
Τμήμα Διοίκησης Επιχειρήσεων και Οργανισμών

Μαθήματα:

- **Θεωρία και Εφαρμογές Μεθόδων Αριστοποίησης,** Προπτυχιακό Πρόγραμμα Σπουδών (BA285), *2024 - 2026*
- **Μαθηματικός Λογισμός σε Επιχειρηματικά Προβλήματα**, Προπτυχιακό Πρόγραμμα Σπουδών (BA261), *2023 - 2026*

Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών
Executive Education

Εκπαιδευτικά προγράμματα:

- **Εργαλεία Επιχειρηματικής Αναλυτικής με το Excel,** e-Learning, *2023 – 2024 - Σήμερα*
- **Βασικές Ψηφιακές Δεξιότητες για Στελέχη Επιχειρήσεων,** e-Learning, *2024 - Σήμερα*

ΑΚΑΔΗΜΑΪΚΗ ΣΥΝΤΑΚΤΙΚΗ ΕΜΠΕΙΡΙΑ

Early Career Editor
Επιστημονικό περιοδικό *Mathematics* (MDPI).
2026

Guest Editor
Ειδικό Τεύχος «Advanced Nature-Inspired Optimization Algorithms», το οποίο εντάσσεται στην ενότητα «Biological Optimisation and Management» του επιστημονικού περιοδικού *Biomimetics* (MDPI).
2026

Άρθρα σε διεθνή περιοδικά (#62)

2026

1) Y. He, T.E. Simos, **S.D. Mourtas**, V.N. Katsikis, *"Pseudoinversion Through an Innovative Noise-Resilient Neutrosophic Logic Activated Zeroing Neural Network: Application to Mobile Object Localization"*, **IEEE Transactions on Fuzzy Systems**, 1-12 (2026)
2) R.T. Alqahtani, T.E. Simos, **S.D. Mourtas**, V.N. Katsikis, *"Handling Uncertainty in Portfolio Optimization: A Neutrosophic Logic Adaptive Neural Network Solver for Quadratic Programming"*, **Neural Networks**, 202, 109026 (2026)
3) I. Alolyan, T.E. Simos, **S.D. Mourtas**, V.N. Katsikis, *"Pseudoinversion through an Innovative Finite-time Neutrosophic Logic activated Zeroing Neural Network: Applications to Robotic Motion Tracking"*, **Journal of Computational and Applied Mathematics**, 486, 117695 (2026)
4) **S.D. Mourtas**, *"Dynamic portfolio optimization under uncertainty: A penalty-function-based neural solver"*, **Applied Mathematics and Computation**, 526, 130086 (2026)
5) H. Jerbi, A. Alateeq, R. Abbassi, M. Kchaou, T.E. Simos, **S.D. Mourtas**, O.V. Giannakopoulos, V.N. Katsikis, *"Inflation Rate Prediction Using a Power-Activation Neural Network With Weight and Structure Determination"*, **Mathematical Methods in the Applied Science**, (2026)
6) H. Jerbi, S.B. Aoun, R. Abbassi, M. Kchaou, T.E. Simos, **S.D. Mourtas**, S. Li, X. Cao, V.N. Katsikis, *"An innovative neutrosophic logic adaptive high-order zeroing neural network for solving linear matrix equations: Applications to acoustic source tracking"*, **Journal of Computational and Applied Mathematics**, 475, 117058 (2026)

2025

7) Y. He, X. Wang, Y. Tie, H. Yang, T.E. Simos, **S.D. Mourtas**, V.N. Katsikis, *"Solving Lur'e equations through zeroing neural networks"*, **Information Sciences**, 718, 122418 (2025)
8) **S.D. Mourtas**, S. Li, X. Cao, B. Liao, V.N. Katsikis, *"Current Trends and Challenges in Applying Metaheuristics to the Innovative Area of Weight and Structure Determination Neuronets"*, **Inventions**, 10(4), 62 (2025)
9) P.S. Stanimirović, **S.D. Mourtas**, D. Mosić, V.N. Katsikis, X. Cao, S. Li, "*A Zeroing Neural Network Approach for Calculating Time-Varying G-Outer Inverse of Arbitrary Matrix*", **IEEE Transactions on Neural Networks and Learning Systems**, 36(5), 8843-8852 (2025)

2024

10) P.S. Stanimirović, **S.D. Mourtas**, D. Mosić, V.N. Katsikis, X. Cao, S. Li, *"Zeroing neural network approaches for computing time-varying minimal rank outer inverse"*, **Applied Mathematics and Computation**, 465, 128412 (2024)
11) P.S. Stanimirović, M. Ćirić, **S.D. Mourtas**, G.V. Milovanović, M.J. Petrović, *"Simultaneous Method for Solving Certain Systems of Matrix Equations with Two Unknowns"*, **Axioms**, 13(12), 838 (2024)
12) P.S. Stanimirović, M. Ćirić, **S.D. Mourtas**, P. Brzaković, D. Karabašević, *"Simulations and Bisimulations between Weighted Finite Automata Based on Time-Varying Models over Real Numbers"*, **Mathematics**, 12(13), 2110 (2024)
13) **S.D. Mourtas**, V.N. Katsikis, P.S. Stanimirović, L.A. Kazakovtsev, *"Credit and Loan Approval Classification Using a Bio-Inspired Neural Network"*, **Biomimetics**, 9(2), 120 (2024)

14) H. Jerbi, I. Al-Darraji, S. Albadran, S.B. Aoun, T.E. Simos, **S.D. Mourtas**, V.N. Katsikis, *"Solving quaternion nonsymmetric algebraic Riccati equations through zeroing neural networks"*, **AIMS Mathematics**, 9(3), 5794-5809 (2024)
15) Y. He, X. Dong, T.E. Simos, **S.D. Mourtas**, V.N. Katsikis, D. Lagios, P. Zervas, G. Tzimas, *"A bio-inspired weights and structure determination neural network for multiclass classification: Applications in occupational classification systems"*, **AIMS Mathematics**, 9(1), 2411-2434 (2024)
16) H. Jerbi, O. Alshammari, S.B. Aoun, M. Kchaou, T.E. Simos, **S.D. Mourtas**, V.N. Katsikis, *"Hermitian Solutions of the Quaternion Algebraic Riccati Equations through Zeroing Neural Networks with Application to Quadrotor Control"*, **Mathematics**, 12(1), 15 (2024)

2023

17) T.E. Simos, V.N. Katsikis, **S.D. Mourtas**, P.S. Stanimirović, *"Solving Time-Varying Nonsymmetric Algebraic Riccati Equations With Zeroing Neural Dynamics"*, **IEEE Transactions on Systems, Man, and Cybernetics: Systems**, 53(10), 6575-6587 (2023)
18) V.N. Katsikis, **S.D. Mourtas**, P.S. Stanimirović, S. Li, X. Cao, *"Time-varying minimum-cost portfolio insurance problem via an adaptive fuzzy-power LVI-PDNN"*, **Applied Mathematics and Computation**, 441, 127700 (2023)
19) S.B. Aoun, N. Derbel, H. Jerbi, T.E. Simos, **S.D. Mourtas**, V.N. Katsikis, *"A quaternion Sylvester equation solver through noise-resilient zeroing neural networks with application to control the SFM chaotic system"*, **AIMS Mathematics**, 8(11), 27376-27395 (2023)
20) V.N. Kovalnogov, R.V. Fedorov, I.I. Shepelev, V.V. Sherkunov, T.E. Simos, **S.D. Mourtas**, V.N. Katsikis, *"A novel quaternion linear matrix equation solver through zeroing neural networks with applications to acoustic source tracking"*, **AIMS Mathematics**, 8(11), 25966-25989 (2023)
21) **S.D. Mourtas**, E. Drakonakis, Z. Bragoudakis, *"Forecasting the gross domestic product using a weight direct determination neural network"*, **AIMS Mathematics**, 8(10), 24254-24273 (2023)
22) V.N. Kovalnogov, R.V. Fedorov, D.A. Demidov, M.A. Malyoshina, T.E. Simos, **S.D. Mourtas**, V.N. Katsikis, *"Computing quaternion matrix pseudoinverse with zeroing neural networks"*, **AIMS Mathematics**, 8(10), 22875-22895 (2023)
23) R. Abbassi, H. Jerbi, M. Kchaou, T.E. Simos, **S.D. Mourtas**, V.N. Katsikis, *"Towards Higher-Order Zeroing Neural Networks for Calculating Quaternion Matrix Inverse with Application to Robotic Motion Tracking"*, **Mathematics**, 11(12), 2756 (2023)
24) V.N. Kovalnogov, R.V. Fedorov, D.A. Demidov, M.A. Malyoshina, T.E. Simos, V.N. Katsikis, **S.D. Mourtas**, R.D. Sahas, *"Zeroing neural networks for computing quaternion linear matrix equation with application to color restoration of images"*, **AIMS Mathematics**, 8(6), 14321-14339 (2023)
25) D. Mosić, P.S. Stanimirović, **S.D. Mourtas**, *"Minimal Rank Properties of Outer Inverses with Prescribed Range and Null Space"*, **Mathematics**, 11(7), 1732 (2023)
26) H. Alharbi, O. Alshammari, H. Jerbi, T.E. Simos, V.N. Katsikis, **S.D. Mourtas**, R.D. Sahas, *"A Fresnel Cosine Integral WASD Neural Network for the Classification of Employee Attrition"*, **Mathematics**, 11(6), 1506 (2023)
27) V.N. Katsikis, P.S. Stanimirović, **S.D. Mourtas**, L. Xiao, D. Stanujkic, D. Karabasevic, *"Zeroing Neural Network Based on Neutrosophic Logic for Calculating Minimal-Norm Least-Squares Solutions to Time-Varying Linear Systems"*, **Neural Processing Letters**, 55, 8731-8753 (2023)
28) **S.D. Mourtas**, C. Kasimis, V.N. Katsikis, *"Robust PID controllers tuning based on the beetle antennae search algorithm"*, **Memories - Materials, Devices, Circuits and Systems**, 4, 100030 (2023)

29) D. Lagios, **S.D. Mourtas**, P. Zervas, G. Tzimas, *"A Weights Direct Determination Neural Network for International Standard Classification of Occupations"*, **Mathematics**, 11(3), 629 (2023)
30) H. Alharbi, H. Jerbi, M. Kchaou, R. Abbassi, T.E. Simos, **S.D. Mourtas**, V.N. Katsikis, *" Time-Varying Pseudoinversion Based on Full-Rank Decomposition and Zeroing Neural Networks"*, **Mathematics**, 11(3), 600 (2023)
31) P.S. Stanimirović, B. Ivanov, D. Stanujkić, V.N. Katsikis, **S.D. Mourtas**, L.A. Kazakovtsev, S.A. Edalatpanah, *"Improvement of Unconstrained Optimization Methods Based on Symmetry Involved in Neutrosophy"*, **Symmetry**, 15(1), 250 (2023)
32) **S.D. Mourtas**, V.N. Katsikis, E. Drakonakis, S. Kotsios, *"Stabilization of Stochastic Exchange Rate Dynamics under Central Bank Intervention using Neuronets"*, **International Journal of Information Technology and Decision Making**, 22(2), 855-883 (2023)

2022

33) V.N. Katsikis, P.S. Stanimirović, **S.D. Mourtas**, L. Xiao, D. Karabasević, D. Stanujkić, *"Zeroing Neural Network with Fuzzy Parameter for Computing Pseudoinverse of Arbitrary Matrix"*, **IEEE Transactions on Fuzzy Systems** 30(9), 3426-3435 (2022)
34) V.N. Katsikis, **S.D. Mourtas**, P.S. Stanimirović, Y. Zhang, *"Solving Complex-Valued Time-Varying Linear Matrix Equations via QR Decomposition With Applications to Robotic Motion Tracking and on Angle-of-Arrival Localization"*, **IEEE Transactions on Neural Networks and Learning Systems**, 33(8), 3415-3424 (2022)
35) **S.D. Mourtas**, V.N. Katsikis, *"Exploiting the Black-Litterman framework through error-correction neural networks"*, **Neurocomputing**, 498, 43-58 (2022)
36) T.E. Simos, V.N. Katsikis, **S.D. Mourtas**, *"A multi-input with multi-function activated weights and structure determination neuronet for classification problems and applications in firm fraud and loan approval"*, **Applied Soft Computing**, 127, 109351 (2022)
37) **S.D. Mourtas**, *"A Weights Direct Determination Neuronet for Time-Series with Applications in the Industrial Indices of the Federal Reserve Bank of St. Louis"*, **Journal of Forecasting**, 41(7), 1512-1524 (2022)
38) T.E. Simos, V.N. Katsikis, **S.D. Mourtas**, P.S. Stanimirović, *"Unique non-negative definite solution of the time-varying algebraic Riccati equations with applications to stabilization of LTV systems"*, **Mathematics and Computers in Simulation**, 202, 164-180 (2022)
39) X. Li, C.-L. Lin, T.E. Simos, **S.D. Mourtas**, V.N. Katsikis, *"Computation of Time-Varying {2,3}- and {2,4}-Inverses through Zeroing Neural Networks"*, **Mathematics**, 10(24), 4759 (2022)
40) H. Jerbi, H. Alharbi, M. Omri, L. Ladhar, T.E. Simos, **S.D. Mourtas**, V.N. Katsikis, *"Towards Higher-Order Zeroing Neural Network Dynamics for Solving Time-Varying Algebraic Riccati Equations"*, **Mathematics**, 10(23), 4490 (2022)
41) P.S. Stanimirović, **S.D. Mourtas**, V.N. Katsikis, L.A. Kazakovtsev, V.N. Krutikov, *"Recurrent Neural Network Models Based on Optimization Methods"*, **Mathematics**, 10(22), 4292 (2022)
42) V.N. Kovalnogov, R.V. Fedorov, D.A. Generalov, A.V. Chukalin, V.N. Katsikis, **S.D. Mourtas**, T.E. Simos, *"Portfolio Insurance through Error-Correction Neural Networks"*, **Mathematics**, 10(18), 3335 (2022)
43) **S.D. Mourtas**, C. Kasimis, *" Exploiting Mean-Variance Portfolio Optimization Problems through Zeroing Neural Networks "*, **Mathematics**, 10(17), 3079 (2022)
44) W. Jiang, C.-L. Lin, V.N. Katsikis, **S.D. Mourtas**, P.S. Stanimirović, T.E. Simos, *"Zeroing Neural Network Approaches Based on Direct and Indirect Methods for Solving the Yang–Baxter-like Matrix Equation"*, **Mathematics**, 10(11), 1950 (2022)
45) T.E. Simos, V.N. Katsikis, **S.D. Mourtas**, P.S. Stanimirović, *"Finite-time Convergent Zeroing Neural Network for Solving Time-Varying Algebraic Riccati Equations"*, **Journal of the Franklin Institute**, 359(18), 10867-10883 (2022)

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47) T.E. Simos, V.N. Katsikis, **S.D. Mourtas**, P.S. Stanimirović, D. Gerontitis, *"A Higher-Order Zeroing Neural Network for Pseudoinversion of an Arbitrary Time-Varying Matrix with Applications to Mobile Object Localization"*, **Information Sciences**, 600, 226-238 (2022)
48) **S.D. Mourtas**, V.N. Katsikis, C. Kasimis, "*Feedback Control Systems Stabilization Using a Bio-inspired Neural Network*", **EAI Endorsed Transactions on AI and Robotics,** 1, 1-13 (2022)

2021

49) V.N. Katsikis, **S.D. Mourtas**, P.S. Stanimirović, S. Li, X. Cao, *"Time-varying mean-variance portfolio selection problem solving via LVI-PDNN"*, **Computers & Operations Research**, 105582 (2021)
50) T.E. Simos, V.N. Katsikis, **S.D. Mourtas**, *"Multi-input bio-inspired weights and structure determination neuronet with applications in European Central Bank publications"*, **Mathematics and Computers in Simulation**, 193, 451-465 (2021)
51) T.E. Simos, V.N. Katsikis, **S.D. Mourtas**, *"A fuzzy WASD neuronet with application in breast cancer prediction"*, **Neural Computing and Applications**, 34, 3019–3031 (2021)
52) T.E. Simos, **S.D. Mourtas**, V.N. Katsikis, *"Time-varying Black–Litterman portfolio optimization using a bio-inspired approach and neuronets"*, **Applied Soft Computing**, 112, 107767 (2021)
53) **S.D. Mourtas**, V.N. Katsikis, *"V-Shaped BAS: Applications on Large Portfolios Selection Problem"*, **Computational Economics**, 60, 1353–1373 (2022)
54) V.N. Katsikis, **S.D. Mourtas**, P.S. Stanimirović, Y. Zhang, *"Continuous-Time Varying Complex QR Decomposition via Zeroing Neural Dynamics"*, **Neural Processing Letters**, 53, 3573–3590 (2021)
55) V.N. Katsikis, **S.D. Mourtas**, "*Binary Beetle Antennae Search Algorithm for Tangency Portfolio Diversification*", **Journal of Modeling and Optimization**, 13(1), 44-50 (2021)
56) V.N. Katsikis, **S.D. Mourtas**, "*Diversification of Time-Varying Tangency Portfolio under Nonlinear Constraints through Semi-Integer Beetle Antennae Search Algorithm*", **AppliedMath,** 1(1), 63-73 (2021)
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2020

58) M.A. Medvedeva, V.N. Katsikis, **S.D. Mourtas**, T.E. Simos, "*Randomized time-varying knapsack problems via binary beetle antennae search algorithm: Emphasis on applications in portfolio insurance* ", **Mathematical Methods in the Applied Science**, 44(2), 2002–2012 (2020)
59) V.N. Katsikis, **S.D. Mourtas**, *"Optimal Portfolio Insurance under Nonlinear Transaction Costs"*, **Journal of Modeling and Optimization**, 12(2), 117-124 (2020)
60) V.N. Katsikis, **S.D. Mourtas**, P.S. Stanimirović, S. Li, X. Cao, *"Time-varying minimum-cost portfolio insurance under transaction costs problem via Beetle Antennae Search Algorithm (BAS)"*, **Applied Mathematics and Computation**, 385, 125453 (2020)

2019

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62) V.N. Katsikis, **S.D. Mourtas**, *"A heuristic process on the existence of positive bases with applications to minimum-cost portfolio insurance in C [a,b]"*, **Applied Mathematics and Computation**, 349, 221–244 (2019)

Κεφάλαια Βιβλίων (#3)

1) V.N. Katsikis, **S.D. Mourtas**, R. Sahas, D. Balios, "*A Weights Direct Determination Neural Network for Credit Card Attrition Analysis*". In: L.A. Maglaras, S. Das, N. Tripathy, S. Patnaik (eds) Machine Learning Approaches in Financial Analytics. **Intelligent Systems Reference Library**, Springer, Cham, vol. 254, 325–346 (2024)
2) V.N. Katsikis, P.S. Stanimirović, **S.D. Mourtas**, S. Li, X. Cao, *"Towards Higher Order Dynamical Systems*". In: I. Kyrchei (ed) Generalized Inverses: Algorithms and Applications. **Mathematics Research Developments**, Nova Science Publishers, Inc., New York, USA, 207-239 (2021)
3) V.N. Katsikis, **S.D. Mourtas**, "*Portfolio Insurance and Intelligent Algorithms*". In: S. Patnaik, K. Tajeddini, V. Jain (eds) Computational Management. **Modeling and Optimization in Science and Technologies**, Springer, Cham, vol. 18, 305-323 (2021)

Άρθρα σε διεθνή συνέδρια με σύστημα κριτών (#9)

1) **S.D. Mourtas**, "*Inflation Rate Prediction Using a Metaheuristic Fuzzy Adaptive WASD Neural Network*". In: P.S. Stanimirović, S.D. Mourtas, J.K. Sahoo (Eds.) Proceedings of IV International Workshop "Hybrid Methods of Modeling and Optimization in Complex Systems: Advances in Interdisciplinary Approaches for Complex Problem Solving", November 21-22, Krasnoyarsk, Russia, 2025. **Lecture Notes in Networks and Systems.** Springer, Cham, vol. 1944, 3-13 (2026)
2) **S.D. Mourtas**, "*A Bio-Inspired Fuzzy Adaptive WASD Neural Network for Forecasting Buying and Selling Patterns*". In: P.S. Stanimirović, S.D. Mourtas, J.K. Sahoo (Eds.) Proceedings of IV International Workshop "Hybrid Methods of Modeling and Optimization in Complex Systems: Advances in Interdisciplinary Approaches for Complex Problem Solving", November 21-22, Krasnoyarsk, Russia, 2025. **Lecture Notes in Networks and Systems.** Springer, Cham, vol. 1944, 319-329 (2026)
3) **S.D. Mourtas**, "*Computing the dynamic AC of an electrical network via a fuzzy adaptive recurrent neural network*". In: P.S. Stanimirović, A.A. Stupina, I.V. Kovalev, S.D. Mourtas, J.K. Sahoo (Eds.) Proceedings of III International Workshop "Hybrid Methods of Modeling and Optimization in Complex Systems", December 2-4, Krasnoyarsk, Russia, 2024. **ITM Web of Conferences**, EDP Sciences, Paris, France, vol. 72, 03003 (2025)
4) **S.D. Mourtas**, "*Credit approval classification through a WASD neuronet*". In: P.S. Stanimirović, A.A. Stupina, I.V. Kovalev, S.D. Mourtas, J.K. Sahoo (Eds.) Proceedings of III International Workshop "Hybrid Methods of Modeling and Optimization in Complex Systems", December 2-4, Krasnoyarsk, Russia, 2024. **ITM Web of Conferences**, EDP Sciences, Paris, France, vol. 72, 05006 (2025)
5) **S.D. Mourtas**, "*Color restoration of images through high order zeroing neural networks*". In: P.S. Stanimirović, A.A. Stupina, I.V. Kovalev (Eds.) Proceedings of II International Workshop "Hybrid Methods of Modeling and Optimization in Complex Systems", November 28-30, Krasnoyarsk, Russia, 2023. **ITM Web of Conferences**, EDP Sciences, Paris, France, vol. 59, 01005 (2024)
6) **S.D. Mourtas**, "*Customer churn classification through a weights and structure determination neural network*". In: P.S. Stanimirović, A.A. Stupina, I.V. Kovalev (Eds.) Proceedings of II International Workshop "Hybrid Methods of Modeling and

Optimization in Complex Systems", November 28-30, Krasnoyarsk, Russia, 2023. **ITM Web of Conferences**, EDP Sciences, Paris, France, vol. 59, 01004 (2024)

7) P.S. Stanimirović, B. Ivanov, V.N. Katsikis, **S.D. Mourtas**, "*Neutrosophy in Unconstrained Nonlinear Optimization*". In: P.S. Stanimirović, A.A. Stupina, E. Semenkin, I.V. Kovalev (Eds.) Proceedings of International Workshop "Hybrid Methods of Modeling and Optimization in Complex Systems", November 22-24, 2022, Krasnoyarsk, the Russian Federation. **European Proceedings of Computers and Technology**, European Publisher, London, UK, vol. 1, 131-193 (2023)
8) **S.D. Mourtas**, P.S. Stanimirović, V.N. Katsikis, "*A Neutrosophic Adaptive Recurrent Neural Network for Time-Varying Matrix Inversion*". In: P.S. Stanimirović, A.A. Stupina, E. Semenkin, I.V. Kovalev (Eds.) Proceedings of International Workshop "Hybrid Methods of Modeling and Optimization in Complex Systems", November 22-24, 2022, Krasnoyarsk, the Russian Federation. **European Proceedings of Computers and Technology**, European Publisher, London, UK, vol. 1, 249-255 (2023)
9) **S.D. Mourtas**, V.N. Katsikis, R. Sahas, "*Credit Card Attrition Classification Through Neuronets*". In: P.S. Stanimirović, A.A. Stupina, E. Semenkin, I.V. Kovalev (Eds.) Proceedings of International Workshop "Hybrid Methods of Modeling and Optimization in Complex Systems", November 22-24, 2022, Krasnoyarsk, the Russian Federation. **European Proceedings of Computers and Technology**, European Publisher, London, UK, vol. 1, 86-93 (2023)

Συλλογικοί Τόμοι (#3)

1) P.S. Stanimirović, **S.D. Mourtas**, J.K. Sahoo (Eds.), *Hybrid Methods for Modeling and Optimizing Complex Systems: Advances in Interdisciplinary Approaches for Complex Problem Solving, Volume 1*. Lecture Notes in Networks and Systems, vol. 1944. Cham, Switzerland: Springer, 2026.
2) P.S. Stanimirović, **S.D. Mourtas**, J.K. Sahoo (Eds.), *Hybrid Methods for Modeling and Optimizing Complex Systems: Advances in Interdisciplinary Approaches for Complex Problem Solving*, Lecture Notes in Networks and Systems, vol. 1481. Cham, Switzerland: Springer, 2025.
3) P.S. Stanimirović, A.A. Stupina, I.V. Kovalev, **S.D. Mourtas**, J.K. Sahoo (Eds.), *Preface*, Proceedings of III International Workshop "Hybrid Methods of Modeling and Optimization in Complex Systems", December 2-4, Krasnoyarsk, Russia, 2024. **ITM Web of Conferences**, Vol. 72, 00001. Paris, France: EDP Sciences, 2025.

ΕΠΑΓΓΕΛΜΑΤΙΚΗ - ΕΡΕΥΝΗΤΙΚΗ ΕΜΠΕΙΡΙΑ

Επιχορήγηση άσκησης ερευνητικού έργου από το ΕΛ.ΙΔ.Ε.Κ.
Επιστημονικά Υπεύθυνος στο πλαίσιο της «4ης Προκήρυξης Ερευνητικών Έργων ΕΛ.ΙΔ.Ε.Κ. για την ενίσχυση Μεταδιδακτορικών Ερευνητών/τριών»
Τίτλος πρότασης: "Fusion αλγόριθμοι βελτιστοποίησης και νευρωνικά δίκτυα διόρθωσης σφαλμάτων με εφαρμογές στη διαχείριση χρηματοοικονομικών χαρτοφυλακίων"
Επιστημονικό πεδίο: Κοινωνικές Επιστήμες
2025 – 2027

Επιχορηγήσεις άσκησης ερευνητικού έργου από το ΕΚΠΑ (#6)
Μελέτη των θεμάτων:

1. "Pseudoinversion through an Innovative Noise-resilient Neutrosophic Logic activated Zeroing Neural Network with applications" (2026)
2. "Inflation Rate Prediction Using a Power-Activation Neural Network with Weight and Structure Determination" (2026)
3. "Time-varying quadratic programming through higher-order zeroing neural networks with application to portfolio selection" (2025)
4. "A Weights Direct Determination Neural Network for Credit Card Attrition

Analysis" (2023 – 2024)
5. "Hermitian solutions of the quaternion algebraic Riccati equations through zeroing neural networks with application to quadrotor control" (2023 – 2024)
6. "Έλεγχος ΑΕΠ και χρέους μέσω Kaleckian δυναμικών υποδειγμάτων" (2021)

Επιχορηγήσεις απόκτησης ακαδημαϊκής εμπειρίας σε νέους επιστήμονες (#4)
ΕΣΠΑ 2021 – 2027
- 3x Επιστημονικό πεδίο: Μαθηματικά
- 1x Επιστημονικό πεδίο: Εφαρμοσμένη Επιχειρησιακή Έρευνα

2023 – 2026

Επιχορήγηση άσκησης ερευνητικού έργου από το Siberian Federal University
Μελέτη του θέματος "Hybrid Methods of Modelling and Optimization in Complex Systems"
2022 – 2024

Επιχορήγηση κινητικότητας
Erasmus+ 2021 – 2027
Sending Institution: University of Nis, Serbia, Computer Science Department
2021 – 2022

ΥΠΟΤΡΟΦΙΕΣ / ΒΡΑΒΕΙΑ

Διεθνές βραβείο
Βραβείο καλύτερου άρθρου για το άρθρο με τίτλο "Credit Card Attrition Classification Through Neuronets"
2022

Υποτροφία
PhD Υποτροφία "Σταύρος Τσακυράκης"
2021 – 2023

ΠΑΡΟΥΣΙΑΣΕΙΣ ΕΡΕΥΝΑΣ

Συνέδρια (#6)
1. "Credit Approval Classification through a Bio-Inspired WASD Neuronet", **HMMOCS-III - Hybrid methods of modeling and optimization in complex systems**, Krasnoyarsk, Russia, 2024
2. "Customer churn classification through a weights and structure determination neural network", **HMMOCS-II - Hybrid methods of modeling and optimization in complex systems**, Krasnoyarsk, Russia, 2023
3. "Prediction of Staff Attrition using Neural Networks", **HETS - International scientific and practical forum on issues of sustainable development in the transition to a new socio-technological order**, Krasnoyarsk, Russia, 2023
4. "Exploiting Markowitz Theory through Zeroing Neural Networks", **ISPC - 4th International Scientific and Practical Conference on "Artificial Intelligence: Technogenic vs Sociality"**, Krasnoyarsk, Russia, 2023
5. "Credit Card Attrition Classification Through Neuronets", **IWMMA - 11th International Workshop on Mathematical Models and their Applications**, Krasnoyarsk, Russia, 2022
6. "Loan Approval Classification Using a Bio-inspired Neural Network", **IMAEF - 8th International Ioannina Meeting on Applied Economics and Finance**, Kefalonia, Greece, 2022

Διάλεξη
"Introduction to Optimization with Application in Finance", **Institute of Business**

Process Management, Siberian Federal University, Krasnoyarsk, Russia, 2022

Webinar
"Portfolio Insurance and Intelligent Algorithms", **Computational Management: Applications of Computational Intelligence in Business Management**, IRNet and IIMT, India, 2020

ΠΙΣΤΟΠΟΙΗΤΙΚΑ ΙΚΑΝΟΤΗΤΑΣ / ΕΞΕΙΔΙΚΕΥΣΗΣ

ECPE - Certificate of Proficiency in English
2018

Web Developer (e-learning Εθνικό και Καποδιστριακό Πανεπιστήμο Αθηνών)
2017

Πτυχίο Αντίστιξης
2013

Πτυχίο Ειδικού Αρμονίας
2011

Πιστοποιητικό Τεχνικού Δικτύων Η/Υ (Key-CERT IT Specialist)
2008

ΠΙΣΤΟΠΟΙΗΤΙΚΑ ΠΑΡΑΚΟΛΟΥΘΗΣΗΣ

16ο Θερινό Σχολείο του Οικονομικού Πανεπιστήμιο Αθηνών στη **Διαχείριση Κινδύνου και τα Στοχαστικά Χρηματοοικονομικά**
2019

Attica Bank Διημερίδα Καινοτομίας
2019

15ο Θερινό Σχολείο του Οικονομικού Πανεπιστήμιο Αθηνών στα **Στοχαστικά Χρηματοοικονομικά**
2018

ΤΕΧΝΙΚΕΣ ΙΚΑΝΟΤΗΤΕΣ

Προγραμματισμός: Fortran, C/C++, Prolog, Java, SQL, CSS, Html, Php, AJAX, JQUERY, Javascript, Python, Matlab, VBA

Μηχανική Μάθηση: Deep Learning for Time Series Forecasting, Optimization Problems, Regression, Classification

Νευρωνικά Δίκτυα: Matlab Neural Network Toolbox, Tensorflow, Tensorflowjs, GNN, ZNN, WASD

Άριστη χρήση Eviews, SPSS, SAS, Latex, MS Office, CMS, Adobe Dreamweaver, Adobe InDesign, Adobe Photoshop

ΞΕΝΕΣ ΓΛΩΣΣΕΣ

Αγγλικά (ευφραδής)