

# Konstantinos Diamantaras

## Curriculum Vitae

### PERSONAL

Current position: Professor  
Work Address: International Hellenic University  
Department of Information and Electronic Engineering  
Sindos, 57400, Greece  
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### EDUCATION

1992 Ph.D., Department of Electrical Engineering, Princeton University, USA.  
1990 Master's, Department of Electrical Engineering, Princeton University, USA.  
1987 Bachelor's Diploma, Department of Electrical Engineering, National Technical University of Athens

### WORK EXPERIENCE

5/2019 – now Professor, Department of Information and Electronic Engineering, International Hellenic University  
4/2006 – 4/2019 Professor, Department of Information Technology, Alexander Technological Education Institute (TEI) of Thessaloniki  
5/2008 – 11/2011 Member of the Hellenic Quality Assurance Agency for Higher Education (HQAA)  
3/2002 – 3/2006 Associate Professor, Department of Information Technology, Alexander Technological Education Institute (TEI) of Thessaloniki  
3/1998 – 2/2002 Assistant Professor, Department of Information Technology, Alexander Technological Education Institute (TEI) of Thessaloniki  
9/1995 – 12/1998 Research associate, Department of Electrical and Computer Engineering, Aristotle University of Thessaloniki. Participation in national and European research projects.  
7/1992 – 6/1993 postdoctoral researcher, Siemens Corp. Research, Princeton, NJ, USA

### ADMINISTRATIVE WORK

6/2019 – now Vice Chairman, Department of Information and Electronic Engineering, International Hellenic University  
5/2019 – 9/2022 Director of the MSc Program: «Web Intelligence», Department of Information and Electronic Engineering, International Hellenic University  
6/2018 – 5/2019 Director of the MSc Program: «Web Intelligence», Department of Information Technology, Alexander Technological Education Institute (TEI) of Thessaloniki

10/ 2017 – 5/2019	Vice Chairman, Department of Information Technology, Alexander Technological Education Institute (TEI) of Thessaloniki
10/2015 – 10/2017	Chairman, Department of Information Technology, Alexander Technological Education Institute (TEI) of Thessaloniki
9/2001 - 8/2006	Chairman, Department of Information Technology, Alexander Technological Education Institute (TEI) of Thessaloniki

#### **AWARDS, DISTINCTIONS, INVITED TALKS**

2022	Plenary Speaker, 13th Conference on Data Analysis Methods for Software Systems (DAMSS2022), Druskininkai, Lithuania, December 1 – 3, 2022, <a href="http://www.mii.vu.lt/DAMSS">http://www.mii.vu.lt/DAMSS</a>
2015	Chalmers University, Department of Electrical Engineering, Sweden. Invited talks: “Parallel and Distributed Technologies for Machine Learning” and “Deep Learning and Natural Language Processing”
2013	Chalmers University, Department of Electrical Engineering, Sweden. Invited talk “Machine Learning: Trends and New Directions”
2011	Korean Advanced Institute Science and Technology (KAIST), South Korea. Invited talk “Geometric and combinatorial methods for the blind separation of binary and discrete sources”.
2009-2010	Chairman, Machine Learning for Signal Processing Technical Committee (MLSP-TC), IEEE Signal Processing Society.
1996	IEEE Signal Processing Society Best Paper Award, S.Y. Kung, K.I. Diamantaras, J.S. Taur, "Adaptive Principal Component Extraction (APEX) and Applications" IEEE Trans. Signal Processing, May 1994.

#### **PROFESSIONAL ACTIVITIES**

##### **Member**

- Senior Member IEEE since 2008. Member IEEE since 1989.
- Member (2005–2011) and Chairman (2009-2010) of the Machine Learning for Signal Processing Technical Committee (MLSP-TC) of the IEEE Signal Processing Society.
- Member (2005-2008) of the Signal Processing - Theory and Methods Technical Committee (SPTM-TC) of the IEEE Signal Processing Society

##### **Conferences organizer**

- EUSIPCO 2017 (25th European Signal Processing Conference, Kos, Greece), 28 Aug. – 2 Sept. 2017, Technical Committee Chair
- MLSP 2016 (26th IEEE International Workshop on Machine Learning for Signal Processing), Vietri sul Mare, Salerno, Italy, September 13-16, 2016, Technical Committee Chair
- BCI2013 (6th Balkan Conference on Informatics), Thessaloniki, Greece, September 19-21, 2013, Conference Chair
- ICANN2010 (20th International Conference on Artificial Neural Networks), Thessaloniki, Greece, September 15-18, 2010, Conference Chair
- MLSP2007 (17th IEEE International Workshop on Machine Learning for Signal Processing), Thessaloniki, Greece, Aug. 27-29, 2007, Conference Chair
- Member of the Technical Organizing Committee in several international conferences, and reviewer of articles in scientific journals

##### **Journal Editor**

- MDPI Applied Sciences, 2020-now
- IEEE Transactions on Signal Processing, 2008-2010
- IEEE Signal Processing Letters, 2008-2013 (Senior Associate Editor 2011-2013)
- IEEE Transactions on Neural Networks, 1999-2000
- Journal of VLSI for Signal Processing Systems (Springer) 1997-now

### SCIENTIFIC INTERESTS

- Machine Learning, Neural Networks, Signal Processing, Parallel Processing, Image Processing

### PUBLICATIONS

My total published scientific work consists of 4 books, 6 book chapters, 58 journal papers, and 108 articles in international peer-reviewed conferences. My work is recognized by the scientific community having a total of 5117 citations, and h-index=27 (source Google Scholar<sup>1</sup>).

#### • Books

1. K. Diamantaras, D. Botsis, *Machine Learning*, Klidarithmos, (in Greek) 2019
2. S. Papadakis, K. Diamantaras, *Programming and Architecture of Parallel Processing Systems*, Klidarithmos, (in Greek), 2012
3. K. Diamantaras, *Artificial Neural Networks*, Klidarithmos, (in Greek), 2007
4. K. I. Diamantaras and S. Y. Kung, *Principal Component Neural Networks: Theory and Applications*, John Wiley, NY, 1996.

#### • Book chapters

1. G. Stalidis, Th. Siomos, P. Kaplanoglou, A. Katsalis, M. Delianidi, I. Karaveli, K. I. Diamantaras, "Multidimensional Factor and Cluster analysis vs embedding-based learning for personalised supermarket offer recommendations", in *Data Analysis and Rationality in a Complex World*, (Edited by Theodore Chadjipadelis, Berthold Lausen, Angelos Markos, Tae Rim Lee, Angela Montanari, Rebecca Nugent), Springer, DOI:10.1007/978-3-030-60104-1, 2021
2. Y. Yu, K. I. Diamantaras, T. McKelvey, S. Y. Kung, "Kernel Subspace Methods for Pattern Classification", in *Adaptive Learning Methods for Nonlinear System Modeling*, D. Comminiello, J. Principe (eds), pp. 127-147, Elsevier, 2018
3. K. I. Diamantaras, "Blind Signal Processing Based on Data Geometric Properties", in *New Directions in Statistical Signal Processing: From Systems to Brain*, S. Haykin, J. Principe, T. Sejnowski, and J. McWhirter (eds), MIT Press, 2006
4. K. I. Diamantaras, "Neural Networks and Principal Component Analysis", in *Handbook of Neural Networks for Signal Processing*, Y.-H. Hu, J.-N. Hwang (eds.), CRC Press, 2001.
5. S. Y. Kung, K. I. Diamantaras, J. S. Taur, "Neural Networks for Extracting Pure/Constrained/Oriented Principal Components", in *SVD and Signal Processing II: Algorithms, Analysis and Applications*, R. Vaccaro ed., pp. 57-81, Elsevier 1991.
6. S. Y. Kung, K. I. Diamantaras, W. D. Mao, J. S. Taur, "Generalized Perceptron Networks with Nonlinear Discriminant Functions", in *Neural Networks, Theory and Applications*, R. J. Mammone and Y. Zeevi eds., pp. 245-279, Academic Press, 1991.

#### • Journals

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<sup>1</sup> <https://scholar.google.com/citations?user=3PQFOncAAAAJ>

1. D. Trigkas, G. Gravanis, K. Diamantaras, S. Voutetakis, S. Papadopoulou, "Energy Management in Microgrids Using Model Predictive Control Empowered with Artificial Intelligence", *Chemical Engineering Transactions*, vol. 94, pp. 961-966, DOI: 10.3303/CET2294160, 2022
2. G. Lampropoulos, E. Keramopoulos, K. Diamantaras, and G. Evangelidis, "Augmented Reality and Gamification in Education: A Systematic Literature Review of Research, Applications, and Empirical Studies," *Applied Sciences*, vol. 12, no. 13, p. 6809, DOI:10.3390/app12136809, July 2022
3. M. Delianidi and K. Diamantaras, "KT-Bi-GRU: Student Performance Prediction with a Recurrent Knowledge Tracing Neural Network", *TechRxiv*, DOI:10.36227/techrxiv.20055545.v2, 2022
4. M. Salampasis, Th. Siomos, A. Katsalis, K. Diamantaras, D. Tektonidis, "Embeddings Methods for Next-Item and Last-Basket Session-Based Recommendations", *Int. J. Machine Learning and Computing*, Vol.12(4): 136-142, DOI:10.18178/ijmlc.2022.12.4.1092, 2022.
5. G. Lampropoulos, E. Keramopoulos, K. Diamantaras, "Semantically Enriched Augmented Reality Applications: A Proposed System Architecture and a Case Study", *International Journal of Recent Contributions from Engineering, Science & IT (IJES)*, vol. 10, no. 1, DOI:10.3991/ijes.v10i01.27463, 2022
6. E. Kamateri, V. Stamatis, K. Diamantaras, M. Salampasis, "Automated Single-Label Patent Classification using Ensemble Classifiers", *arXiv preprint arXiv:2203.03552*, 2022
7. S. Evmorfos, K. Diamantaras, A. Petropulu, "Reinforcement Learning for Motion Policies in Mobile Relaying Networks", *IEEE Transactions on Signal Processing*, vol. 70, pp. 850-861, Jan. 2022, DOI: 10.1109/TSP.2022.3141305
8. G. Gravanis, I. Dragogias, K. Papakiriakos, C. Ziogou, K. I. Diamantaras, "Fault Detection and Diagnosis for Non-Linear Processes empowered by Dynamic Neural Networks", *Computers and Chemical Engineering*, vol. 156, DOI:10.1016/j.compchemeng.2021.107531, Jan 2022, available online 30 September 2021.
9. G. Lampropoulos, E. Keramopoulos, K. Diamantaras, "Enhancing the functionality of augmented reality using deep learning, semantic web and knowledge graphs: a review", accepted for publication, *Visual Informatics*, Elsevier, 2020
10. C. Timplalexis, D. Chasanidis, I. Chouvarda, K. I. Diamantaras, "Towards exploration and evaluation of sleep staging classification schemes for healthy and patient subjects", *EAI Endorsed Transactions on Bioengineering and Bioinformatics (BEBI)*, European Alliance for Innovation (EAI), 2020. DOI:10.4108/eai.19-10-2020.166665
11. Y. Han, I. Christoudis, K. I. Diamantaras, S. Zonouz, A. Petropulu, "Side-Channel-Based Code-Execution Monitoring Systems: A Survey", *IEEE Signal Processing Magazine*, vol. 36, no. 2, pp. 22-35, March 2019
12. G. Gravanis, A. Vakali, K. I. Diamantaras, P. Karadais, "Behind the Cues: A benchmarking study for Fake News Detection", to appear in *Expert Systems with Applications*, Elsevier, doi: <https://doi.org/10.1016/j.eswa.2019.03.036>, available online March 2019
13. S. Sevastas, D. Gasparatos, D. Botsis, I. Siarkos, K. I. Diamantaras, G. Bilas, "Predicting bulk density using pedotransfer functions for soils in the Upper Anthemountas basin, Greece", *Geoderma Regional*, vol. 14,B Elsevier, September 2018.
14. K. Goulianas, A. Margaris, I. Refanidis, K. I. Diamantaras, "Solving polynomial systems using a fast adaptive back propagation-type neural network algorithm", *European Journal of Applied Mathematics*, vol. 29, issue 2, pp. 301-337, April 2018.
15. S. Ougiaroglou, K. I. Diamantaras, G. Evangelidis, "Exploring the effect of Data Reduction on Neural Network and Support Vector Machine Classification", *Neurocomputing*, vol. 280, pp. 101-110, Elsevier, March 2018.
16. Y. Yu, K. I. Diamantaras, T. McKelvey, S. Y. Kung, "CLAss-specific Subspace Kernel Representations and Adaptive Margin Slack Minimization for Large Scale Classification", *IEEE Transactions on Neural Networks and Learning Systems*, vol. 29, no 2, Feb. 2018.

17. G. A. Papakostas, K. I. Diamantaras, Th. Papadimitriou, "Parallel Pattern Classification Utilizing CPU Based Kernelized Slackmin Algorithm", *Journal of Parallel and Distributed Computing*, vol. 99, pp. 90-99, Elsevier, January 2017
18. M. Giatsoglou, M. Vozalis, K. I. Diamantaras, A. Vakali, G. Sarigiannidis, K. Ch. Chatzisavvas, "Sentiment Analysis Leveraging Emotions and Word Embeddings", *Expert Systems with Applications*, vol. 69, pp. 214-224, Elsevier, 1 March 2017
19. V. Plakandaras, Th. Papadimitriou, P. Gogas, K. I. Diamantaras, "Market Sentiment and Exchange Rate Directional Forecasting", *Algorithmic Finance*, vol. 4, no. 1-2, DOI: 10.3233/AF-150044, 2015
20. T. Vafeiadis, K. I. Diamantaras, G. Sarigiannidis, K. Ch. Chatzisavvas, "A Comparison of Machine Learning Techniques for Customer Churn Prediction", *Simulation Modelling Practice and Theory*, vol. 55, pp. 1-9, doi:10.1016/j.simpat.2015.03.003, Elsevier, 2015
21. K. Goulianas, A. Margaritis, I. Refanidis, K. I. Diamantaras, "An Adaptive Learning Rate Backpropagation-type Neural Network for Solving  $n \times n$  Systems of Non Linear Algebraic Equations", *Mathematical Methods in the Applied Sciences*, doi: 10.1002/mma.3715, Wiley, 2015
22. P. Stalidis, M. Giatsoglou, K. I. Diamantaras, G. Sarigiannidis, K. Ch. Chatzisavvas, "Machine Learning Sentiment Prediction based on Hybrid Document Representation", arXiv:1511.09107 [cs.CL], 2015
23. M. Kotti, K. I. Diamantaras, "Efficient Binary Classification Through Energy Minimisation of Slack Variables", *Neurocomputing*, Elsevier, DOI: 10.1016/j.neucom.2014.07.013, vol. 148, pp. 498-511, 2015
24. K. I. Diamantaras, G. Vranou, Th. Papadimitriou, "Multi-Input Single-Output Nonlinear Blind Separation of Binary Sources", *IEEE Trans. Signal Processing*, vol. 61, no. 11, pp. 2866-2873, June 2013
25. A. Margaritis, K. Goulianas, K. I. Diamantaras, Th. Papadimitriou, "Estimating 2-cycle Fixed Points of Henon Map Using Backpropagation Neural Networks", *Mathematical Methods in the Applied Sciences*, vol. 38, no. 2, pp. 263-273, John Wiley, 2015, Article first published online: 27 Dec. 2013, doi: 10.1002/mma.3064
26. T. Adali, D. J. Miller, K. I. Diamantaras, J. Larsen, "Trends in Machine Learning for Signal Processing", T. Adali, D.J. Miller, K.I. Diamantaras, and J. Larsen, *IEEE Signal Processing Magazine*, pp. 193-196, Nov. 2011
27. K. I. Diamantaras, Th. Papadimitriou, "Blind Deconvolution of Multi-Input Single-Output Systems Using the Distribution of Point Distances", *Journal Signal Processing Systems*, Springer, Volume 65, Number 3, Pages 525-534, Oct. 2011, DOI 10.1007/s11265-010-0555-9, published online Nov. 2010.
28. M. Zampoglou, Th. Papadimitriou, K. I. Diamantaras, "From Low-Level Features to Semantic Classes: Spatial and Temporal Descriptors for Video Indexing", M. Zampoglou, Th. Papadimitriou and K. Diamantaras, *Journal of Signal Processing Systems*, Vol. 61, no 1, pp. 75-83, Springer, 2009.
29. K. I. Diamantaras, Th. Papadimitriou, "Applying PCA Neural Models for the Blind Separation of Signals", *Neurocomputing*, vol. 73, no. 1-3, pp. 3-9, Elsevier, 2009
30. K. I. Diamantaras, Th. Papadimitriou, "An Efficient Subspace Method for the Blind Identification of Multi-Channel FIR Systems", *IEEE Transactions on Signal Processing*, vol. 56, no. 12, pp. 5833-5839, December 2008
31. N. Kofidis, A. Margaritis, K. I. Diamantaras, M. Roumeliotis, "Blind System Identification: Instantaneous Mixtures of Binary Sources", *International Journal of Computer Mathematics*, Volume 85, Issue 9, pages 1333 - 1340, September 2008
32. K. I. Diamantaras, Th. Papadimitriou, "Blind Deconvolution of Multi-Input Single-Output Systems with Binary Sources", *IEEE Transactions on Signal Processing*, vol. 54, no. 10, pp. 3720-3731, October 2006

33. K. I. Diamantaras, Th. Papadimitriou, "Subspace-based Channel Shortening for the Blind Separation of Convolutional Mixtures", *IEEE Transactions on Signal Processing*, vol. 54, no. 10, pp. 3669-3677, October 2006
34. K. I. Diamantaras, "A Clustering Approach for the Blind Separation of Multiple Finite Alphabet Sequences from a Single Linear Mixture", *Signal Processing*, Vol. 86, Issue 4, pp. 877-891, Elsevier, April 2006
35. Th. Papadimitriou, K. I. Diamantaras, M. G. Strintzis, M. Roumeliotis, "Video Scene Segmentation using Spatial Contours and 3-D Robust Motion Estimation", *IEEE Transactions on Circuits and Systems for Video Technology*, vol. 14, no. 4, April 2004
36. I. Bradaric, A. Petropulu, K. I. Diamantaras, "Blind MIMO FIR Channel Identification Based on Second-Order Spectra Correlations", *IEEE Transactions on Signal Processing*, vol. 51, no. 6, pp. 1668-1674, June 2003.
37. I. Bradaric, A. Petropulu, K. I. Diamantaras, "On Blind Identifiability of FIR-MIMO Systems with Cyclostationary Inputs Using Second Order Statistics", *IEEE Transactions on Signal Processing*, vol. 51, no. 2, pp. 434-441, Feb. 2003.
38. K. I. Diamantaras, "Blind channel identification based on the geometry of the received signal constellation", *IEEE Transactions on Signal Processing*, vol. 50, no. 5, pp. 1133-1143, May 2002.
39. M. Salampasis, K. I. Diamantaras, "Experimental User-Centered Evaluation of an Open Hypermedia System and Web Information Seeking Environments", *Journal of Digital Information*, vol. 2, issue 4, article no. 105, 31-May 2002
40. I. Bradaric, A. Petropulu, K. I. Diamantaras, "Subspace design of low-rank estimators for higher-order statistics", *Journal of the Franklin Institute*, vol. 339, pp. 161-187, Elsevier, 2002.
41. K. I. Diamantaras, "Blind Source Separation using Principal Component Neural Networks", in *ICANN 2001, Lecture Notes in Computer Science vol. 2130*, G. Dorffner, H. Bischof and K. Hornik (Eds.), pp. 515-520, Springer Verlag, 2001.
42. K. I. Diamantaras, M. G. Strintzis, "Optimal Reconstruction from Quantized Data", *Signal Processing-Image Communication*, vol. 15, no. 9, pp. 811-815, Elsevier, July 2000.
43. Th. Papadimitriou, K. I. Diamantaras, M. G. Strintzis, M. Roumeliotis, "Robust Estimation of Rigid Body 3-D Motion Parameters based on Point Correspondences", *IEEE Transactions on Circuits and Systems for Video Technology*, vol. 10, no. 4, pp. 541-549, June 2000.
44. K. I. Diamantaras, A. Petropulu, B. Chen, "Blind Two-Input-Two-Output FIR Channel Identification Based on Second-Order Statistics", *IEEE Transactions on Signal Processing*, vol. 48, no. 2, pp.534-542, Feb. 2000.
45. K. I. Diamantaras, M. G. Strintzis, "Optimal Transform Coding in the Presence of Quantization Noise", *IEEE Transactions on Image Processing*, vol. 8, no. 11, pp. 1508-1515, Nov. 1999.
46. K. I. Diamantaras, K. Hornik, M. G. Strintzis, "Optimal Linear Compression Under Unreliable Representation and Robust PCA Neural Models", *IEEE Transactions on Neural Networks*, vol. 10, no. 5, pp. 1186-1195, Sept. 1999.
47. N. Maglaveras, T. Stamkopoulos, K. I. Diamantaras, C. Pappas, M. G. Strintzis, "ECG Pattern Recognition and Classification Using Non-linear Transformations and Neural Networks: A Review", *International Journal of Medical Informatics*, vol. 52, pp. 191-208, 1998.
48. T. Stamkopoulos, K. I. Diamantaras, N. Maglaveras, M. G. Strintzis, "ECG Analysis Using Non-linear PCA Neural Networks for Ischemia Detection", *IEEE Transactions on Signal Processing*, vol. 46, no 11, pp. 3058-3067, Nov. 1998.
49. K. I. Diamantaras, M. G. Strintzis, "Neural Classifiers Using One-Time Updating", *IEEE Trans. Neural Networks*, vol. 9, no 3, pp. 436-447, May 1998.
50. K. I. Diamantaras, "Robust Hebbian Learning and Noisy Principal Component Analysis", *International Journal of Computer Mathematics*, Gordon & Breach Science Publishers, vol. 68, no. 1-2, pp. 5-24, 1997.
51. K. I. Diamantaras, S. Y. Kung, "A Linear Systolic Array for Real-Time Morphological Image Processing", *Journal of VLSI Signal Processing*, Kluwer, vol. 17, no.1, pp. 43-55, Kluwer, September 1997.

52. K. I. Diamantaras, W. H. Chou, S. Y. Kung, "Dynamic Programming Implementation on Array Processor Architectures", *Journal of VLSI Signal Processing*, vol. 13, no. 1, pp. 27-36, Kluwer, August 1996.
53. K. I. Diamantaras, S. Y. Kung, "Cross-correlation Neural Network Models", *IEEE Transactions on Signal Processing*, pp. 3218-3223, vol. 42, no. 11, November 1994.
54. K. I. Diamantaras, S. Y. Kung, "Multi-layer Neural Networks for Reduced-Rank Approximation", *IEEE Transactions on Neural Networks*, pp. 684-697, vol. 5, no. 5, September 1994.
55. S. Y. Kung, K. I. Diamantaras, J. S. Taur, "Adaptive Principal Component Extraction (APEX) and Applications", *IEEE Transactions on Signal Processing*, pp. 1202-1217, vol. 42, no. 5, May 1994.
56. K. I. Diamantaras, N. K. Jha, "A New Transition Count for Testing of Logic Circuits", *IEEE Transactions on CAD of ICAS*, pp. 407-410, vol. 10, no. 3, March 1991.
57. P. N. Paraskevopoulos, K. I. Diamantaras, "Algorithms for Characteristic Polynomial Assignment of 2-D Discrete Systems", *Proceedings IEE, Part D*, vol. 137, no. 2, pp. 94-97, March 1990.
58. P. N. Paraskevopoulos, K. I. Diamantaras, "A New Orthogonal Series Approach to State-Space Analysis of 1-D and 2-D Discrete Systems", *Proceedings IEE, Part G*, vol. 137, no. 3, pp. 205-209, June 1990.

- **Conferences**

1. A. Katsalis, K. Christantonis, C. Tsiouostas, P. I. Kaplanoglou, M. Kaliakatsos-Papakostas, A. Katsamanis, K. Diamantaras, V. Katsouros, E. Fotinea, D. Panga, D. Loupi. NLP-Theatre: Employing Speech Recognition Technologies for Improving Accessibility and Augmenting the Theatrical Experience. In: Arai, K. (eds) *Intelligent Systems and Applications. IntelliSys 2022. Lecture Notes in Networks and Systems*, vol 543. Springer, Cham. [https://doi.org/10.1007/978-3-031-16078-3\\_35](https://doi.org/10.1007/978-3-031-16078-3_35).
2. G. Gkenios, K. Latsiou, K. Diamantaras, I. Chouvarda, and M. Tsolaki, "Diagnosis of Alzheimer's disease and Mild Cognitive Impairment using EEG and Recurrent Neural Networks", to appear, *IEEE Int. Conf. Engineering in Medicine and Biology Society*, Glasgow, Scotland, 11-15 July, <https://doi.org/10.1109/EMBC48229.2022.9871302>, 2022
3. G. Bastas, M. Kaliakatsos-Papakostas, G. Paraskevopoulos, P. Kaplanoglou, K. Christantonis, C. Tsiouostas, D. Mastrogiannopoulos, D. Panga, E. Fotinea, A. Katsamanis, V. Katsouros, K. Diamantaras, P. Maragos, "Towards a DHH Accessible Theater: Real-Time Synchronization of Subtitles and Sign Language Videos with ASR and NLP Solutions", *Proc. 15th Int. Conf. on Pervasive Technologies Related to Assistive ENvironments (PETRA-2022)*, Corfu, Greece, 2022
4. I. Chouvarda, L. Mpaltadoros, I. Boutziona, G. Tsakonas, M. Tsolaki, and K. Diamantaras. "Exploring Classification in Open and Closed Eyes EEG Data for People with Cognitive Disorders". In *Proceedings of the 15th International Joint Conference on Biomedical Engineering Systems and Technologies - BIOSIGNALS*, pp. 298-305, ISBN 978-989-758-552-4, DOI: 10.5220/0011010100003123, 2022
5. S. Evmorfos, K. I. Diamantaras, A. Petropulu, "Double Deep Q Learning with Gradient Biasing for Mobile Relay Beamforming Networks", in *Asilomar Conference on Signals, Systems, and Computers*, , pp. 742-746, Oct. 31th - Nov 3rd, Pacific Grove, CA, USA, 2021
6. S. Evmorfos, K. Diamantaras, A. Petropulu, "Deep Q Learning With Fourier Feature Mapping For Mobile Relay Beamforming Networks", in *Proceedings, 22nd IEEE International Workshop on Signal Processing Advances in Wireless Communications (SPAWC-2021)*, Sept. 27-30, 2021
7. M. Delianidi, K. I. Diamantaras, G. Chrysogonidis, V. Nikiforidis, "Student Performance Prediction Using Dynamic Neural Models", in *Proc. 14th Int. Conf. Educational Data Mining, I-Han (Sharon) Hsiao, Shaghayegh (Sherry) Sahebi, Francois Bouchet, Jill-Jenn Vie (eds)*, pp. 46-54, June 29 - July 2, 2021
8. K. I. Diamantaras, M. Salampasis, A. Katsalis, K. Christantonis, "Predicting shopping intent of e-commerce users using LSTM recurrent neural networks", In *Proceedings 10th Int. Conf. Data Science, Technology and Applications (DATA2021)*, ISBN 978-989-758-521-0, pages 252-259. July 6-8, 2021, DOI: 10.5220/0010554102520259

9. Z. Xu, F. Liu, K. I. Diamantaras, C. Masouros, A. Petropulu, "Learning to Select for MIMO Radar Based on Hybrid Analog-Digital Beamforming", 2021 IEEE Int. Conf. Acoustics, Speech and Signal Processing (ICASSP), pp. 8228-8232, Toronto, 6-11 June, 2021
10. M. Salampasis, Th. Siomos, A. Katsalis, K. I. Diamantaras, K. Christantonis, M. Delianidi, P. Kaplanoglou, I. Karaveli, G. Stalidis, "Comparison of RNN and Embeddings Methods for Next-item and Last-basket Session-based Recommendations", in 13th Int. Conf. Machine Learning and Computing (ICMLC 2021), pp. 477-484, Shenzhen, China, 26 Feb.-1 March 2021
11. A. Dimas, K. I. Diamantaras, A. Petropulu, "Q-Learning Based Predictive Relay Selection for Optimal Relay Beamforming", to appear in Proc. IEEE Int. Conf. Acoustics, Speech, Signal Processing (ICASSP-2020), Barcelona, May 4-8, 2020
12. A. Dimas, K. I. Diamantaras, A. Petropulu, "A Reinforcement Learning Approach for Mobile Beamforming", Asilomar Conference on Signals, Systems and Computers, Pacific Grove, 2019
13. S. Ougiaroglou, G. Evangelidis, K. I. Diamantaras, "Dynamic k-NN classification based on subspace homogeneity", 24th European Conference on Advances in Databases and Information Systems (ADBIS-2020), (virtual conference) August 25-27, 2020
14. C. Tsiouostas, D. Petratou, M. Kaliakatsos-Papakostas, V. Katsouros, K. Christantonis, K. I. Diamantaras, M. Loupis, "Innovative Applications of Natural Language Processing and Digital Media in Theatre and Performing Arts", In Proceedings of the ENTRENOVA-ENTERPRISE RESEARCH INNOVATION CONFERENCE, Virtual Conference, vol. 6, pp. 84-96, 10-12 September 2020. Zagreb: IRENET-Society for Advancing Innovation and Research in Economy.
15. M. Salampasis, Th. Siomos, A. Katsalis, K. I. Diamantaras, K. Christantonis, M. Delianidi, P. Kaplanoglou, I. Karaveli, G. Stalidis, "Embeddings Methods for Next item and Last basket Session based Recommendations", in 7th International Conference on Artificial Intelligence (ICOAI-2020), Full virtual conference, 14-16 Oct. 2020
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