Mikel Galar

List of Publications by Citations

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89 4,131 26 64 g-index

102 5,125 4.5 ext. papers ext. citations avg, IF 5.67 L-index

| # | Paper | IF | Citations |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 89 | A Review on Ensembles for the Class Imbalance Problem: Bagging-, Boosting-, and Hybrid-Based Approaches. <i>IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews</i> , 2012 , 42, 463-484 | | 1372 |
| 88 | An overview of ensemble methods for binary classifiers in multi-class problems: Experimental study on one-vs-one and one-vs-all schemes. <i>Pattern Recognition</i> , 2011 , 44, 1761-1776 | 7.7 | 465 |
| 87 | EUSBoost: Enhancing ensembles for highly imbalanced data-sets by evolutionary undersampling. <i>Pattern Recognition</i> , 2013 , 46, 3460-3471 | 7.7 | 242 |
| 86 | Analysing the classification of imbalanced data-sets with multiple classes: Binarization techniques and ad-hoc approaches. <i>Knowledge-Based Systems</i> , 2013 , 42, 97-110 | 7.3 | 216 |
| 85 | Learning from Imbalanced Data Sets 2018 , | | 198 |
| 84 | A New Approach to Interval-Valued Choquet Integrals and the Problem of Ordering in Interval-Valued Fuzzy Set Applications. <i>IEEE Transactions on Fuzzy Systems</i> , 2013 , 21, 1150-1162 | 8.3 | 144 |
| 83 | Evolutionary undersampling boosting for imbalanced classification of breast cancer malignancy. <i>Applied Soft Computing Journal</i> , 2016 , 38, 714-726 | 7.5 | 138 |
| 82 | Medical diagnosis of cardiovascular diseases using an interval-valued fuzzy rule-based classification system. <i>Applied Soft Computing Journal</i> , 2014 , 20, 103-111 | 7.5 | 95 |
| 81 | Enhancing Multiclass Classification in FARC-HD Fuzzy Classifier: On the Synergy Between \$n\$-Dimensional Overlap Functions and Decomposition Strategies. <i>IEEE Transactions on Fuzzy Systems</i> , 2015 , 23, 1562-1580 | 8.3 | 92 |
| 80 | Analyzing the presence of noise in multi-class problems: alleviating its influence with the One-vs-One decomposition. <i>Knowledge and Information Systems</i> , 2014 , 38, 179-206 | 2.4 | 87 |
| 79 | A survey on fingerprint minutiae-based local matching for verification and identification: Taxonomy and experimental evaluation. <i>Information Sciences</i> , 2015 , 315, 67-87 | 7.7 | 82 |
| 78 | Dynamic classifier selection for One-vs-One strategy: Avoiding non-competent classifiers. <i>Pattern Recognition</i> , 2013 , 46, 3412-3424 | 7.7 | 75 |
| 77 | Fuzzy Rule-Based Classification Systems for multi-class problems using binary decomposition strategies: On the influence of n-dimensional overlap functions in the Fuzzy Reasoning Method. <i>Information Sciences</i> , 2016 , 332, 94-114 | 7.7 | 67 |
| 76 | DRCW-OVO: Distance-based relative competence weighting combination for One-vs-One strategy in multi-class problems. <i>Pattern Recognition</i> , 2015 , 48, 28-42 | 7.7 | 61 |
| 75 | Interval-valued fuzzy sets applied to stereo matching of color images. <i>IEEE Transactions on Image Processing</i> , 2011 , 20, 1949-61 | 8.7 | 61 |
| 74 | Tackling the problem of classification with noisy data using Multiple Classifier Systems: Analysis of the performance and robustness. <i>Information Sciences</i> , 2013 , 247, 1-20 | 7.7 | 58 |
| 73 | INFFC: An iterative class noise filter based on the fusion of classifiers with noise sensitivity control. <i>Information Fusion</i> , 2016 , 27, 19-32 | 16.7 | 55 |

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| 72 | Ordering-based pruning for improving the performance of ensembles of classifiers in the framework of imbalanced datasets. <i>Information Sciences</i> , 2016 , 354, 178-196 | 7.7 | 55 | |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----|--|
| 71 | A survey of fingerprint classification Part I: Taxonomies on feature extraction methods and learning models. <i>Knowledge-Based Systems</i> , 2015 , 81, 76-97 | 7.3 | 42 | |
| 70 | Consensus via penalty functions for decision making in ensembles in fuzzy rule-based classification systems. <i>Applied Soft Computing Journal</i> , 2018 , 67, 728-740 | 7.5 | 40 | |
| 69 | Dynamic ensemble selection for multi-class classification with one-class classifiers. <i>Pattern Recognition</i> , 2018 , 83, 34-51 | 7.7 | 38 | |
| 68 | CHI-BD: A fuzzy rule-based classification system for Big Data classification problems. <i>Fuzzy Sets and Systems</i> , 2018 , 348, 75-101 | 3.7 | 36 | |
| 67 | Evolutionary undersampling for extremely imbalanced big data classification under apache spark 2016 , | | 36 | |
| 66 | A survey of fingerprint classification Part II: Experimental analysis and ensemble proposal. <i>Knowledge-Based Systems</i> , 2015 , 81, 98-116 | 7.3 | 31 | |
| 65 | On the impact of anisotropic diffusion on edge detection. <i>Pattern Recognition</i> , 2014 , 47, 270-281 | 7.7 | 28 | |
| 64 | Empowering difficult classes with a similarity-based aggregation in multi-class classification problems. <i>Information Sciences</i> , 2014 , 264, 135-157 | 7.7 | 26 | |
| 63 | Evolutionary undersampling for imbalanced big data classification 2015, | | 22 | |
| 62 | Minutiae filtering to improve both efficacy and efficiency of fingerprint matching algorithms. <i>Engineering Applications of Artificial Intelligence</i> , 2014 , 32, 37-53 | 7.2 | 22 | |
| 61 | Composition of interval-valued fuzzy relations using aggregation functions. <i>Information Sciences</i> , 2016 , 369, 690-703 | 7.7 | 22 | |
| 60 | . IEEE Transactions on Fuzzy Systems, 2020 , 28, 163-177 | 8.3 | 18 | |
| 59 | NMC: nearest matrix classification IA new combination model for pruning One-vs-One ensembles by transforming the aggregation problem. <i>Information Fusion</i> , 2017 , 36, 26-51 | 16.7 | 14 | |
| 58 | Addressing the Overlapping Data Problem in Classification Using the One-vs-One Decomposition Strategy. <i>IEEE Access</i> , 2019 , 7, 83396-83411 | 3.5 | 14 | |
| 57 | A Comparison Study of Different Color Spaces in Clustering Based Image Segmentation. <i>Communications in Computer and Information Science</i> , 2010 , 532-541 | 0.3 | 14 | |
| 56 | A new survival status prediction system for severe trauma patients based on a multiple classifier system. <i>Computer Methods and Programs in Biomedicine</i> , 2017 , 142, 1-8 | 6.9 | 13 | |
| 55 | CHI-PG: A fast prototype generation algorithm for Big Data classification problems. Neurocomputing, 2018, 287, 22-33 | 5.4 | 12 | |

| 54 | Aggregation functions to combine RGB color channels in stereo matching. Optics Express, 2013, 21, 124 | 173537 | 10 |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----|
| 53 | d-Choquet integrals: Choquet integrals based on dissimilarities. Fuzzy Sets and Systems, 2021, 414, 1-27 | 3.7 | 9 |
| 52 | Super-Resolution of Sentinel-2 Images Using Convolutional Neural Networks and Real Ground Truth Data. <i>Remote Sensing</i> , 2020 , 12, 2941 | 5 | 7 |
| 51 | Bitcoin and Cybersecurity: Temporal Dissection of Blockchain Data to Unveil Changes in Entity Behavioral Patterns. <i>Applied Sciences (Switzerland)</i> , 2019 , 9, 5003 | 2.6 | 7 |
| 50 | A first attempt on global evolutionary undersampling for imbalanced big data 2017, | | 6 |
| 49 | SUPER-RESOLUTION FOR SENTINEL-2 IMAGES. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives,XLII-2/W16, 95-102 | 2.5 | 6 |
| 48 | Multicriteria Decision Making by Means of Interval-Valued Choquet Integrals. <i>Advances in Intelligent and Soft Computing</i> , 2011 , 269-278 | | 6 |
| 47 | A framework for radial data comparison and its application to fingerprint analysis. <i>Applied Soft Computing Journal</i> , 2016 , 46, 246-259 | 7.5 | 6 |
| 46 | EUSC: A clustering-based surrogate model to accelerate evolutionary undersampling in imbalanced classification. <i>Applied Soft Computing Journal</i> , 2021 , 101, 107033 | 7.5 | 6 |
| 45 | A preliminary study on fingerprint classification using fuzzy rule-based classification systems 2014 , | | 5 |
| 44 | Representing images by means of interval-valued fuzzy sets. Application to stereo matching 2011, | | 5 |
| 43 | A First Study on Decomposition Strategies with Data with Class Noise Using Decision Trees. <i>Lecture Notes in Computer Science</i> , 2012 , 25-35 | 0.9 | 5 |
| 42 | Foundations on Imbalanced Classification 2018 , 19-46 | | 5 |
| 41 | Enhancing evolutionary fuzzy systems for multi-class problems: Distance-based relative competence weighting with truncated confidences (DRCW-TC). <i>International Journal of Approximate Reasoning</i> , 2016 , 73, 108-122 | 3.6 | 4 |
| 40 | An Evolutionary UnderBagging Approach to Tackle the Survival Prediction of Trauma Patients: A Case Study at the Hospital of Navarre. <i>IEEE Access</i> , 2019 , 7, 76009-76021 | 3.5 | 4 |
| 39 | A generalization of the Perona-Malik anisotropic diffusion method using restricted dissimilarity functions. <i>International Journal of Computational Intelligence Systems</i> , 2013 , 6, 14-28 | 3.4 | 4 |
| 38 | Imbalanced Classification for Big Data 2018 , 327-349 | | 4 |
| 37 | Algorithm-Level Approaches 2018 , 123-146 | | 4 |

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| 36 | FUZZ-EQ: A data equalizer for boosting the discrimination power of fuzzy classifiers. <i>Applied Soft Computing Journal</i> , 2020 , 93, 106399 | 7.5 | 3 |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------|
| 35 | Ensemble Learning 2018 , 147-196 | | 3 |
| 34 | IVOVO: A new interval-valued one-vs-one approach for multi-class classification problems 2017, | | 2 |
| 33 | Operators on intuitionistic fuzzy relations 2015 , | | 2 |
| 32 | On the Use of t-Conorms in the Gravity-Based Approach to Edge Detection 2009, | | 2 |
| 31 | Generative Adversarial Networks for Bitcoin Data Augmentation 2020, | | 2 |
| 30 | TOWARDS FINE-GRAINED ROAD MAPS EXTRACTION USING SENTINEL-2 IMAGERY. <i>ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences</i> ,V-3-2021, 9-14 | | 2 |
| 29 | 2018, | | 2 |
| 28 | A Study of OWA Operators Learned in Convolutional Neural Networks. <i>Applied Sciences</i> (Switzerland), 2021 , 11, 7195 | 2.6 | 2 |
| 27 | A Deep Learning Approach to an Enhanced Building Footprint and Road Detection in | | |
| -/ | High-Resolution Satellite Imagery. <i>Remote Sensing</i> , 2021 , 13, 3135 | 5 | 2 |
| 26 | High-Resolution Satellite Imagery. <i>Remote Sensing</i> , 2021 , 13, 3135 Theoretical and Empirical Criteria for the Edited Nearest Neighbour Classifier 2015 , | 5 | 1 |
| | | 5 4 | |
| 26 | Theoretical and Empirical Criteria for the Edited Nearest Neighbour Classifier 2015 , Extending the upper[bwer edge detector by means of directional masks and OWA operators. | | 1 |
| 26 25 | Theoretical and Empirical Criteria for the Edited Nearest Neighbour Classifier 2015, Extending the upperIbwer edge detector by means of directional masks and OWA operators. Progress in Artificial Intelligence, 2012, 1, 267-276 Construction of Interval Type-2 Fuzzy Sets From Fuzzy Sets: Methods and Applications. Studies in | 4 | 1 |
| 26 25 24 | Theoretical and Empirical Criteria for the Edited Nearest Neighbour Classifier 2015, Extending the upperIbwer edge detector by means of directional masks and OWA operators. Progress in Artificial Intelligence, 2012, 1, 267-276 Construction of Interval Type-2 Fuzzy Sets From Fuzzy Sets: Methods and Applications. Studies in Fuzziness and Soft Computing, 2013, 147-163 On the use of quasi-arithmetic means for the generation of edge detection blending functions | 4 | 1 1 |
| 26 25 24 23 | Theoretical and Empirical Criteria for the Edited Nearest Neighbour Classifier 2015, Extending the upperIbwer edge detector by means of directional masks and OWA operators. Progress in Artificial Intelligence, 2012, 1, 267-276 Construction of Interval Type-2 Fuzzy Sets From Fuzzy Sets: Methods and Applications. Studies in Fuzziness and Soft Computing, 2013, 147-163 On the use of quasi-arithmetic means for the generation of edge detection blending functions 2010, Learning Channel-Wise Ordered Aggregations in Deep Neural Networks. Advances in Intelligent | 0.7 | 1 1 1 |
| 26 25 24 23 22 | Theoretical and Empirical Criteria for the Edited Nearest Neighbour Classifier 2015, Extending the upperIbwer edge detector by means of directional masks and OWA operators. Progress in Artificial Intelligence, 2012, 1, 267-276 Construction of Interval Type-2 Fuzzy Sets From Fuzzy Sets: Methods and Applications. Studies in Fuzziness and Soft Computing, 2013, 147-163 On the use of quasi-arithmetic means for the generation of edge detection blending functions 2010, Learning Channel-Wise Ordered Aggregations in Deep Neural Networks. Advances in Intelligent Systems and Computing, 2021, 1023-1030 A Study of Different Families of Fusion Functions for Combining Classifiers in the One-vs-One | 0.7 | 1 1 1 1 1 |

| 18 | Aggregation of Color Information in Stereo Matching Problem: A Comparison Study. <i>Lecture Notes in Computer Science</i> , 2010 , 369-378 | 0.9 | 1 |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---|
| 17 | A Preliminary Study of the Usage of Similarity Measures to Detect Singular Points in Fingerprint Images. <i>Advances in Intelligent Systems and Computing</i> , 2013 , 367-378 | 0.4 | 1 |
| 16 | Additional Feature Layers from Ordered Aggregations for Deep Neural Networks 2020, | | 1 |
| 15 | Multi-Class Strategies for Joint Building Footprint and Road Detection in Remote Sensing. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 8340 | 2.6 | 1 |
| 14 | Attacking Bitcoin anonymity: generative adversarial networks for improving Bitcoin entity classification. <i>Applied Intelligence</i> ,1 | 4.9 | 1 |
| 13 | Unsupervised Fuzzy Measure Learning for Classifier Ensembles From Coalitions Performance. <i>IEEE Access</i> , 2020 , 8, 52288-52305 | 3.5 | O |
| 12 | Network traffic analysis through node behaviour classification: a graph-based approach with temporal dissection and data-level preprocessing. <i>Computers and Security</i> , 2022 , 115, 102632 | 4.9 | 0 |
| 11 | Data Level Preprocessing Methods 2018 , 79-121 | | O |
| 10 | Imbalanced Classification with Multiple Classes 2018 , 197-226 | | 0 |
| 9 | Similarity Measures for Radial Data. Communications in Computer and Information Science, 2016, 599-61 | 10.3 | |
| 8 | Multiscale Extension of the Gravitational Approach to Edge Detection. <i>Lecture Notes in Computer Science</i> , 2011 , 283-292 | 0.9 | |
| 7 | Dissimilarity Based Choquet Integrals. Communications in Computer and Information Science, 2020, 565- | 57333 | |
| 6 | On the Influence of Admissible Orders in IVOVO. Lecture Notes in Computer Science, 2019, 358-369 | 0.9 | |
| 5 | On the Influence of Interval Normalization in IVOVO Fuzzy Multi-class Classifier. <i>Advances in Intelligent Systems and Computing</i> , 2019 , 44-57 | 0.4 | |
| 4 | Construction of Capacities from Overlap Indexes. Studies in Computational Intelligence, 2017, 323-335 | 0.8 | |
| 3 | An Experimental Case of Study on the Behavior of Multiple Classifier Systems with Class Noise Datasets. <i>Lecture Notes in Computer Science</i> , 2013 , 568-577 | 0.9 | |
| 2 | Improving the Performance of FARC-HD in Multi-class Classification Problems Using the One-Versus-One Strategy and an Adaptation of the Inference System. <i>Communications in Computer and Information Science</i> , 2014 , 296-306 | 0.3 | |
| 1 | Software and Libraries for Imbalanced Classification 2018 , 351-377 | | |