Corrado Mencar

1 Notizie Generali

1.1 Percorso formativo

Dottorato di Ricerca (2005) Dottorato di Ricerca in Informatica, conseguito presso l'Università degli Studi di Bari il 05/04/2005.

Laurea (2000) Laurea quinquennale in Informatica, conseguita presso l'Università degli Studi di Bari il 14/12/2000. Votazione: 110/110 con lode.

1.2 Posizioni professionali

02/09/2019– Professore Associato presso il Dipartimento di Informatica dell'Università degli Studi di Bari "A. Moro", SSD INF/01 - Informatica;

01/01/2005 01/09/2019– Ricercatore Universitario presso il Dipartimento di Informatica dell'Università degli Studi di Bari "A. Moro", SSD INF/01 - Informatica;

1.3 Abilitazioni

- Abilitazione nazionale a *Professore Ordinario* ex art. 16 della legge 240/2010 per il settore concorsuale 01/B1 (Informatica), S.S.D. INF/01 (Informatica)

2 Attività didattica, di didattica integrativa e di servizio agli studenti

Il candidato è stato titolare di insegnamenti per **corsi di laurea triennali e magistrali** erogati nell'Università degli Studi di Bari Aldo Moro ininterrottamente a partire dall'A.A. 2004/2005 ad oggi.

3 Incarichi di insegnamento nell'ambito di dottorati di ricerca accreditati dal MIUR

Il candidato è stato titolare dei seguenti insegnamenti nei corsi di **Dottorato di Ricerca** in Informatica (cicli dal XXV al XXIX) e Informatica e Matematica (cicli dal XXX in poi).

1. Ciclo XXV, anno II, Insegnamento caratterizzante di *Metodi avanzati di Intelligenza Computazionale* (Proff: Anna Maria Fanelli, Corrado Mencar, Giovanna Castellano). Ore complessive 30, di cui erogate dal candidato: 6
2. Ciclo XXVI, anno II, Insegnamento caratterizzante di *Metodi avanzati di Intelligenza Computazionale* (Proff: Anna Maria Fanelli, Corrado Mencar, Giovanna Castellano, Ciro Castiello). Ore complessive 30, di cui erogate dal candidato: 9

3. Ciclo XXVII, anno II, Insegnamento caratterizzante di *Metodi avanzati di Intelligenza Computazionale* (Proff: Anna Maria Fanelli, Corrado Mencar, Giovanna Castellano, Ciro Castiello). Ore complessive 30, di cui erogate dal candidato: 9

4. Ciclo XXVIII, anno II, Insegnamento caratterizzante di *Metodi avanzati di Intelligenza Computazionale* (Proff: Anna Maria Fanelli, Corrado Mencar, Giovanna Castellano, Ciro Castiello). Ore complessive 30, di cui erogate dal candidato: 9

5. Ciclo XXIX, anno I, Insegnamento fondamentale di *Teoria dell'Informazione* (5 CFU), mutuato dall'insegnamento omonimo del corso di laurea Magistrale in Informatica. Ore complessive 40, di cui erogate dal candidato: 40

6. Ciclo XXX, anno I, Insegnamento fondamentale di *Teoria dell'Informazione* (5 CFU). Ore complessive 40, di cui erogate dal candidato: 40

7. Ciclo XXX, anno II, Insegnamento caratterizzante di *Granular Computing* (5 CFU). Ore complessive 40, di cui erogate dal candidato: 40

8. Ciclo XXXI, anno I Insegnamento ad-hoc di *Granular Computing* (5 CFU). Ore complessive 40, di cui erogate dal candidato: 40

9. Ciclo XXXV, anno I, Insegnamento di *Explainable Artificial Intelligence* (2 CFU). Ore complessive 16, di cui erogate dal candidato: 16

10. Ciclo XXXVII, anno I, Insegnamento di *Explainable Artificial Intelligence* (2 CFU). Ore complessive 23, di cui erogate dal candidato: 23

4 Commissioni di esame di Dottorato di ricerca

2021 **Presidente** della Commissione di Esame di Dottorato in Smart Computing, ciclo XXXIII, **Università degli Studi di Firenze**

2015 Membro esterno della Commissione di esame di Dottorato di Ricerca in Ingegneria Informatica presso l'**Universidad de Oviedo, Asturias (Spain)**

Il candidato è stato **esaminatore** per dottorandi in istituzioni estere:

1. Ayad Al-Mahturi, **University of New South Wales, Australia**, Titolo della tesi: *"Development of Self-Learning Type-2 Fuzzy Systems for System Identification and Control of Dynamic Systems"*

5 Incarichi di insegnamento e collaborazioni internazionali per la didattica

Il candidato ha svolto le seguenti attività didattiche destinate a studenti internazionali, tenute presso sedi italiane o estere:

2016 Seminario su "Interpretability of Fuzzy Systems", tenuto presso il **Donadeo Innovation Centre for Engineering, University of Alberta, Canada**, 20 luglio 2016 a dottorandi di ricerca;

2017 Lezione intitolata "From Granular Computing to Fuzzy Modeling", durante la III **European Summer School on Fuzzy Logic and Applications** (SFLA 2017), promossa dalla European Society for Fuzzy Logic and Technology (EUSFLAT) (16-20 luglio 2017, **Santiago de Compostela, Spain**).

2019 Lezione intitolata "Explainable Artificial Intelligence", **Summer School of Information Engineering** (SSIE 2019), promossa dalla **IEEE Italy Section, Bressanone (BZ)**, 8-12 luglio 2019

2021 Seminario su *Explainable Artificial Intelligence and Fuzzy Systems,* Computational Intelligence Lectures Series organized by the IEEE Italy Section Computational Intelligence Society Chapter, Dec. 17th, 2020, Online (**su invito**)

2021 Relatore al Webinar *Explainable Fuzzy Systems* organizzato dalla **IEEE Computational Intelligence Society**, 24 giugno 2021, online (**su invito**)

6 Supervisore, relatore e revisore di dottorandi di ricerca

Il candidato è stato **relatore e supervisore** (tutor) di 5 dottorandi nel Dottorato di Ricerca in Informatica. Il candidato è stato **co-tutor** (fino al ciclo XXVIII) o **membro della "commissione dottorando"** (dal ciclo XXIX) di 14 dottorandi, nel dottorato di ricerca in Informatica (5), Informatica e Matematica (6), Geomorfologia e Dinamica Ambientale (1), Scienze Statistiche (2).

Il candidato è correntemente o è stato **revisore esterno** per dottorandi in istituzioni nazionali ed estere:

1. Noelia Hernández Parra, **Departemento de Electrónica, Universidad de Alcalá (Spagna)**, Ph.D. program: "Electronics: Advanced Electronics Systems. Intelligent Systems", Titolo della tesi: "*Smart Hierarchical WiFi Localization Systems for Indoors*"
2. Eduardo José Molinos Vicente, **Departemento de Electrónica, Universidad de Alcalá (Spagna)**, PhD. Program in "Electronics: Advanced Electronic Systems. Intelligent Systems". Titolo della tesi: *"Dynamic Obstacles Avoidance Algorithms for Unmanned Ground Vehicles"*
3. Claudio Zaza, Dottorato di Ricerca in "Innovazione e Management di Alimenti ad Elevata Valenza Salutistica" (XXX Ciclo), **Università degli Studi di Foggia**, progetto di dottorato: *ICT Tools for Data Management and Analysis to Support Decisional Process Oriented to Sustainable Agri-Food Chains*
4. Nino Adamashvili, Dottorato di Ricerca in "Translational Medicine And Food: Innovation, Safety And Management" (XXXIII ciclo), **Università degli Studi di Foggia**, progetto di dottorato: *Big data analytics tools for improve the decision-making process in agri-food supply chain*

Attività scientifica, di ricerca e dei servizi prestati Il candidato è membro del gruppo di ricerca CILab (Computational Intelligence Laboratory) del Dipartimento di Informatica, Università degli Studi di Bari "A. Moro" dal 2001.

7 Progetti di ricerca

Il candidato ha partecipato con ruoli di responsabilità scientifica (di attività o di unità di lavoro) in 5 progetti di ricerca finanziati da vari enti nazionali. Inoltre, il candidato ha attivamente partecipato a 22 progetti di ricerca finanziati da vari enti nazionali.

Dal 2016, il candidato è inserito nel registro REPRISE del MIUR. In quest'ambito, ha svolto attività di revisione per il Fondo Integrativo Speciale per la Ricerca (FISR), per la revisione di n. 42 proposte progettuali.

Inoltre, ha svolto attività di revisione di progetti per enti internazionali quali il National Science Center (Poland), Czech Science Foundation, National Research, Development and Innovation Office, Ungheria.

Infine, il candidato è stato **Responsabile scientifico** di un assegno di ricerca tipo B.

8 Partecipazione a comitati editoriali di riviste internazionali

8.1 Associate Editor

2021-oggi **Associate Editor** per la rivista *IEEE Transactions on Fuzzy Systems* ISSN 1063-6706

2008-oggi **Associate Editor** per la rivista *International Journal on Artificial Intelligence* ISSN 0974-0635

2017-2021 **Associate Editor** per la rivista *IEEE Access* ISSN 2169-3536

2019 **Associate Editor** per la rivista *Granular Computing*, Springer, ISSN 2364-4966

8.2 Organizzazione di eventi scientifici internazionali

2021 **General Co-chair** della conferenza **13th International Workshop on Fuzzy Logic and Applications** (WILF 2021), Vietri sul Mare, 20–22 Dicembre 2021. https://sites.google.com/view/wilf-2021/home

2020 **General Co-chair** e **Publication Chair** della conferenza **IEEE Conference on Evolving and Adaptive Intelligent Systems** (IEEE EAIS 2020), Bari, 27–29 Maggio 2020, organizzata dalla IEEE Technical Committee on Evolving and Adaptive Intelligent Systems e sponsorizzata dalla IEEE Computational Intelligence Society e dalla IEEE Systems, Man and Cybernetics Society. eais2020.di.uniba.it

8.3 Organizzazione di scuole internazionali

2018 **General Chair** della IV **European Summer School on Fuzzy Logic and Applications**, promossa dalla European Society for Fuzzy Logic and Technology (EUSFLAT), Bari, 25-29 giugno 2018 sfla2018.di.uniba.it.

9 Relatore in tutorial e tavole rotonde

2021 *Relatore del* **Tutorial** *Explainable Fuzzy Systems: Paving the way from Interpretable Fuzzy Systems to Explainable Artificial Intelligence,* FUZZ-IEEE 2021 - IEEE International Conference on Fuzzy Systems, 11–14 luglio 2021, Bruxelles (online)

2020 *Relatore del* **Tutorial** *Paving the way from Interpretable Fuzzy Systems to Explainable AI Systems,* WCCI 2020 - IEEE World Congress on Computational Intelligence, 19–24 luglio 2020, Glasgow, UK (online)

2018 *Relatore del* **Tutorial** *Paving the way to eXplainable Artificial Intelligence with fuzzy modeling,* WILF 2018 - 12th International Workshop on Fuzzy Logic and Applications, Genova (Italy), 6-7 Settembre 2018 (**su invito**) [56]

2018 *Relatore alla* **Tavola Rotonda** *Zadeh and the future of fuzzy logic*, WILF 2018 - 12th International Workshop on Fuzzy Logic and Applications, Genova (Italy), 6-7 Settembre 2018 (**su invito**) [55]

2017 *Relatore del* **Tutorial** *Interpretability of Fuzzy Systems,* IJCCI 2017 - 9th International Joint Conference on Computational Intelligence, Funchal, Madeira (Portugal) - November 1–3, 2017

2013 *Relatore del* **Tutorial** *Interpretability of Fuzzy Systems,* WILF 2013 - 10th International Workshop on Fuzzy Logic and Applications, Casa Paganini - Genoa (Italy) - November 19-22, 2013 [77]

10 Partecipazione a Comitati di Programma di conferenze internazionali

Si riporta l'elenco delle principali conferenze nelle quali il candidato è stato membro dei comitati di programma.

- **IEEE International Conference on Systems, Man and Cybernetics** [IEEESMC] (*Associate Editor*) (2019, 2020)
- **International Joint Conference on Artificial Intelligence** [IJCAI] (2019–2022);
- **European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases** [ECML PKDD] (2015, 2019)

Dal 2010 Corrado Mencar è accreditato come recensore esperto (**featured reviewer**) per ACM Computing Reviews.

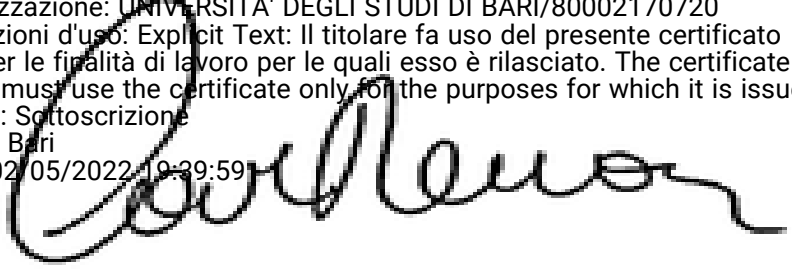
11 Attività di ricerca

La produzione scientifica è articolata in diversi temi di ricerca:

- Sistemi neuro-fuzzy
- Interpretabilità nei sistemi a logica fuzzy
- eXplainable Artificial Intelligence (XAI)
- Intelligent Data Analysis (IDA)
- Computational Web Intelligence
- Granular Computing
- Drone Vision

Bari, 05/02/2022

Firmato digitalmente da: Corrado Mencar
Organizzazione: UNIVERSITA' DEGLI STUDI DI BARI/80002170720
Limitazioni d'uso: Explicit Text: Il titolare fa uso del presente certificato solo per le finalità di lavoro per le quali esso è rilasciato. The certificate holder must use the certificate only for the purposes for which it is issued.
Motivo: Sottoscrizione
Luogo: Bari
Data: 02/05/2022 19:39:59



Elenco delle pubblicazioni

Articoli su riviste

[1] Ciro Castiello, Gabriella Casalino, Giovanna Castellano, **Corrado Mencar** (**2022**), *Effect of fuzziness in fuzzy rule-based classifiers defined by strong fuzzy partitions and winner-takes-all inference*, In: Soft Computing, , no. (in press).

[2] Giovanna Castellano, Ciro Castiello, **Corrado Mencar**, Gennaro Vessio (**2020**), *Crowd Detection in Aerial Images Using Spatial Graphs and Fully-Convolutional Neural Networks*, In: IEEE Access, volume 8, pages 64534–64544, ISSN 2169-3536, DOI https://dx.doi.org/10.1109/ACCESS.2020.2984768.

[3] Ciro Castiello, **Corrado Mencar** (**2020**), *Fine-Tuning the Fuzziness of Strong Fuzzy Partitions through PSO*, In: International Journal of Computational Intelligence Systems, volume 13, no. 1, pages 1415—-1428, ISSN 1875-6883, DOI https://dx.doi.org/10.2991/ijcis.d.200904.002.

[4] **Corrado Mencar**, Crescenzio Gallo, Marco Mantero, Paolo Tarsia, Giovanna E. Carpagnano, Maria P. Foschino Barbaro, Donato Lacedonia (**2020**), *Application of machine learning to predict obstructive sleep apnea syndrome severity*, In: Health Informatics Journal, volume 26, no. 1, pages 298–317, ISSN 1460-4582, DOI https://dx.doi.org/10.1177/1460458218824725.

[5] **Corrado Mencar**, Witold Pedrycz (**2020**), *Granular counting of uncertain data*, In: Fuzzy Sets and Systems, volume 387, pages 108–126, ISSN 01650114, DOI https://dx.doi.org/10.1016/j.fss.2019.04.018.

[6] Gabriella Casalino, Giovanna Castellano, **Corrado Mencar** (**2019**), *Data Stream Classification by Dynamic Incremental Semi-Supervised Fuzzy Clustering*, In: International Journal on Artificial Intelligence Tools, volume 28, no. 08, page 1960009, ISSN 0218-2130, DOI https://dx.doi.org/10.1142/S0218213019600091.

[7] Ciro Castiello, Anna Maria Fanelli, Marco Lucarelli, **Corrado Mencar** (**2019**), *Interpretable fuzzy partitioning of classified data with variable granularity*, In: Applied Soft Computing, volume 74, pages 567–582, ISSN 15684946, DOI https://dx.doi.org/10.1016/j.asoc.2018.10.040.

[8] **Corrado Mencar**, Witold Pedrycz (**2019**), *GrCount: Counting method for uncertain data*, In: MethodsX, volume 6, pages 2455–2459, ISSN 22150161, DOI https://dx.doi.org/10.1016/j.mex.2019.10.001.

[9] Antonella Vacca, Roberto Longo, **Corrado Mencar** (**2019**), *Identification and evaluation of cognitive deficits in schizophrenia using "Machine learning".*, In: Psychiatria Danubina, volume 31, no. Suppl 3, pages 261–264, ISSN 0353-5053, URL https://europepmc.org/article/med/31488738.

[10] Gabriella Casalino, Ciro Castiello, Nicoletta Del Buono, **Corrado Mencar** (**2018**), *A framework for Intelligent twitter data analysis with nonnegative matrix factorization*, In: International Journal of Web Information Systems, volume 14, no. 3, pages 334–356, ISSN 1744-0084, DOI https://dx.doi.org/10.1108/IJWIS-11-2017-0081.

[11] Francesca Alessandra Lisi, **Corrado Mencar** (**2018**), *A Granular Computing Method for OWL Ontologies*, In: Fundamenta Informaticae, volume 159, no. 1-2, pages 147–174, ISSN 01692968, DOI https://dx.doi.org/10.3233/FI-2018-1661.

[12] Arianna Consiglio, **Corrado Mencar**, Giorgio Grillo, Flaviana Marzano, Mariano Francesco Caratozzolo, Sabino Liuni (**2016**), *A fuzzy method for RNA-Seq differential expression analysis in presence of multireads*, In: BMC Bioinformatics, volume 17, no. S12:345, pages 167–182, ISSN 1471-2105, DOI https://dx.doi.org/10.1186/s12859-016-1195-2.

[13] Gabriella Casalino, Nicoletta Del Buono, **Corrado Mencar** (**2014**), *Subtractive clustering for seeding non-negative matrix factorizations*, In: Information Sciences, volume 257, pages 369–387, ISSN 0020-0255, DOI https://dx.doi.org/10.1016/j.ins.2013.05.038.

[14] Piero Molino, Gianvito Pio, **Corrado Mencar** (**2013**), *Fast Fuzzy Inference in Octave*, In: International Journal of Computational Intelligence Systems, volume 6, no. 2, pages 307–317, ISSN 1875-6891, DOI https://dx.doi.org/10.1080/18756891.2013.769765.

[15] **Corrado Mencar**, Ciro Castiello, Raffaele Cannone, Anna Maria Fanelli (**2011**), *Design of fuzzy rule-based classifiers with semantic cointension*, In: Information Sciences, volume 181, no. 20, pages 4361–4377, ISSN 00200255, DOI https://dx.doi.org/10.1016/j.ins.2011.02.014.

[16] **Corrado Mencar**, Ciro Castiello, Raffaele Cannone, Anna Maria Fanelli (**2011**), *Interpretability assessment of fuzzy knowledge bases: A cointension based approach*, In: International Journal of Approximate Reasoning, volume 52, no. 4, pages 501–518, ISSN 0888613X, DOI https://dx.doi.org/10.1016/j.ijar.2010.11.007.

[17] Giovanna Castellano, Ciro Castiello, Danilo Dell'Agnello, Anna Maria Fanelli, **Corrado Mencar**, Maria Alessandra Torsello (**2010**), *Learning Fuzzy User Profiles for Resource Recommendation*, In: International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems, volume 18, no. 04, pages 389–410, ISSN 0218-4885, DOI https://dx.doi.org/10.1142/S0218488510006611.

[18] **Corrado Mencar**, Anna Maria Fanelli (**2008**), *Interpretability constraints for fuzzy information granulation*, In: Information Sciences, volume 178, no. 24, pages 4585–4618, ISSN 0020-0255, DOI https://dx.doi.org/10.1016/j.ins.2008.08.015.

[19] **Corrado Mencar**, Giovanna Castellano, Anna Maria Fanelli (**2007**), *Distinguishability quantification of fuzzy sets*, In: Information Sciences, volume 177, no. 1, pages 130–149, ISSN 0020-0255, DOI https://dx.doi.org/10.1016/j.ins.2006.04.008.

[20] **Corrado Mencar**, Giovanna Castellano, Anna Maria Fanelli (**2007**), *On the role of interpretability in fuzzy data mining*, In: International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems (IJUFKS), volume 15, no. 05, page 521, ISSN 0218-4885, DOI https://dx.doi.org/10.1142/S0218488507004856.

[21] **Corrado Mencar**, Giovanna Castellano, Anna Maria Fanelli (**2006**), *Interface optimality in fuzzy inference systems*, In: International Journal of Approximate Reasoning, volume 41, no. 2, pages 128–145, ISSN 0888-613X, DOI https://dx.doi.org/10.1016/j.ijar.2005.06.013.

[22] Giovanna Castellano, Ciro Castiello, Anna Maria Fanelli, **Corrado Mencar** (**2005**), *Knowledge Discovery by a Neuro-Fuzzy Modeling Framework*, In: Fuzzy Sets and Systems, volume 149, no. 1, pages 187–207, ISSN 0165-0114, DOI https://dx.doi.org/10.1016/j.fss.2004.07.015.

[23] **Corrado Mencar**, Giovanna Castellano, Anna Maria Fanelli (**2005**), *Deriving prediction intervals for neuro-fuzzy networks*, In: Mathematical And Computer Modelling,

volume 42, no. 7-8, pages 719–726, ISSN 0895-7177, DOI https://dx.doi.org/10.1016/j.mcm.2005.09.001.

[24] Giovanna Castellano, Ciro Castiello, Anna Maria Fanelli, **Corrado Mencar** (**2004**), *Una Metodologia Neuro-Fuzzy per la Predizione delle Proprieta dei Rifiuti Industriali*, In: Intelligenza Artificiale, volume 1, no. 3, pages 27–35, ISSN 1724-8035, URL http://ia.di.uniba.it/magazine/2004{_}3/indice.html.

[25] Giovanna Castellano, Anna Maria Fanelli, **Corrado Mencar** (**2004**), *An Empirical Risk Functional to Improve Learning in a Neuro-Fuzzy Classifier*, In: IEEE Transactions on Systems, Man and Cybernetics, Part B (Cybernetics), volume 34, no. 1, pages 725–731, ISSN 1083-4419, DOI https://dx.doi.org/10.1109/TSMCB.2003.811291.

[26] Giovanna Castellano, Anna Maria Fanelli, **Corrado Mencar** (**2003**), *Fuzzy information granules: a compact, transparent and efficient representation*, In: Journal of Advanced Computational Intelligence and Intelligent Informatics, volume 7, no. 2, pages 160–168, ISSN 1343-0130, URL https://www.fujipress.jp/jaciii/jc/jacii000700020160/.

[27] Giovanna Castellano, Anna Maria Fanelli, **Corrado Mencar** (**2002**), *A neuro-fuzzy network to generate human-understandable knowledge from data*, In: Cognitive Systems Research, volume 3, no. 2, pages 125–144, ISSN 13890417, DOI https://dx.doi.org/10.1016/S1389-0417(01)00055-9.

[28] Giovanna Castellano, Anna Maria Fanelli, **Corrado Mencar** (**2002**), *Generation of interpretable fuzzy granules by a double-clustering technique*, In: Archives of Control Science, volume 12, no. 4, pages 397–410, ISSN 1230-2384, URL http://acs.polsl.pl/index.php?mode=2{&}show=15.

Monografie e curatele

[29] José Maria Alonso, Ciro Castiello, Luis Magdalena, **Corrado Mencar** (**2021**). Explainable Fuzzy Systems: Paving the Way from Interpretable Fuzzy Systems to Explainable AI Systems, volume 970 of *Studies in Computational Intelligence*. Springer International Publishing, Cham, ISBN 978-3-030-71097-2, DOI https://dx.doi.org/10.1007/978-3-030-71098-9. URL http://link.springer.com/10.1007/978-3-030-71098-9.

[30] Giovanna Castellano, Ciro Castiello, **Corrado Mencar** (editors) (**2020**). 2020 IEEE Conference on Evolving and Adaptive Intelligent Systems (EAIS). IEEE, ISBN 978-1-7281-4384-2, DOI https://dx.doi.org/10.1109/EAIS48028.2020. URL https://ieeexplore.ieee.org/xpl/conhome/9119729/proceeding.

Capitoli di libri

[31] José Maria Alonso, Ciro Castiello, **Corrado Mencar** (**2019**), *The Role of Interpretable Fuzzy Systems in Designing Cognitive Cities*, In: Portmann, E., Seising, R., Tabachi, M. (editors), Designing Cognitive Cities: Linking Citizens to Computational Intelligence to Make Efficient, Sustainable and Resilient Cities a Reality, volume 176, pages 131–152. Springer - Verlag, DOI https://dx.doi.org/10.1007/978-3-030-00317-3_6.

[32] Gabriella Casalino, Nicoletta Del Buono, **Corrado Mencar** (**2016**), *Nonnegative Matrix Factorizations for Intelligent Data Analysis*, In: Naik, G. (editor), Nonnegative Matrix Factorization Techniques: Advances in Theory and Applications, pages 49–75. Springer-Verlag Berlin Heidelberg, 1 edition, ISBN 978-3-662-48330-5, DOI https://dx.doi.org/10.1007/978-3-662-48331-2_2.

[33] Arianna Consiglio, **Corrado Mencar**, Giorgio Grillo, Sabino Liuni (**2016**), *Managing NGS Differential Expression Uncertainty with Fuzzy Sets*, In: Angelini, C., Rancoita, P., Rovetta, S. (editors), Computational Intelligence Methods for Bioinformatics and Biostatistics. CIBB 2015 (Revised Selected Papers), pages 42–53. Springer, ISBN 978-3-319-44331-7, DOI https://dx.doi.org/10.1007/978-3-319-44332-4_4.

[34] José Maria Alonso, Ciro Castiello, **Corrado Mencar** (**2015**), *Interpretability of Fuzzy Systems: Current Research Trends and Prospects*, In: Kacprzyk, J., Pedrycz, W. (editors), Springer Handbook of Computational Intelligence, pages 219–237. Springer Berlin / Heidelberg, ISBN 978-3-662-43504-5, DOI https://dx.doi.org/10.1007/978-3-662-43505-2_14.

[35] José Maria Alonso, Ciro Castiello, Marco Lucarelli, **Corrado Mencar** (**2012**), *Modeling interpretable fuzzy rule-based classifiers for Medical Decision Support*, In: Magdalena, R., Soria, E., Guerrero, J., Gómez-ÂSanchis, J., Serrano, A. (editors), Medical Applications of Intelligent Data Analysis: Research advancements, pages 255–272. IGI Global, ISBN 9781466618039, DOI https://dx.doi.org/10.4018/978-1-4666-1803-9.ch017.

[36] Giovanna Castellano, Anna Maria Fanelli, **Corrado Mencar**, Anna Maria Fanelli (**2011**), *Fuzzy Information Granulation with Multiple Levels of Granularity*, In: Pedrycz, W., Chen, S.-M. (editors), Granular Computing and Intelligent Systems, volume 13 of *Intelligent systems reference library*, pages 185–202. Spinger, ISBN 978-3-642-19820-5, DOI https://dx.doi.org/10.1007/978-3-642-19820-5_9.

[37] **Corrado Mencar** (**2009**), *Interpretability of Fuzzy Information Granules*, In: Bargiela, A., Pedrycz, W. (editors), Human-Centric Information Processing Through Granular Modelling, volume 182/2009 of *Studies in Computational Intelligence*, pages 95–118. Springer Berlin / Heidelberg, ISBN 978-3-540-92915-4, DOI https://dx.doi.org/10.1007/978-3-540-92916-1_5.

[38] **Corrado Mencar** (**2009**), *Proposta metodologica, valutazione della metodologia*, In: Massari, A. (editor), Modelli statistici basati su reti neuro-fuzzy per la stima delle emissioni inquinanti in atmosfera, chapter 10,12, pages 191–207; 217–244. Cacucci Editore, ISBN 978-88-8422-742-3.

[39] **Corrado Mencar**, Giovanna Castellano, Anna Maria Fanelli, **Corrado Mencar** (**2007**), *Mining diagnostic rules using fuzzy clustering*, In: de Oliveira, J., Pedrycz, W. (editors), Advances in Fuzzy Clustering and Its Applications, pages 211–228. John Wiley \& Sons, Ltd, West Sussex, UK, ISBN 978-0-470-02760-8, DOI https://dx.doi.org/10.1002/9780470061190.ch10.

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