

Autilia Vitiello

Curriculum Vitae

Department of Physics "Ettore Pancini"
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Education

Main

- 2013 **PhD, Teorie, metodologie e applicazioni avanzate per la comunicazione, l'informatica e la fisica (curriculum informatica)**, *University of Salerno, Italy*, Title of Thesis: *Memetic Algorithms for Ontology Alignment*.
15 April 2013
- 2009 **Laurea cum Laude, Master's Degree in Computer Science**, *University of Salerno, Italy*, Title of Thesis (in Italian): *Time Sensitive Fuzzy Agents: Modello formale ed implementazione*.
16 July 2009
- 2006 **Laurea cum Laude, Bachelor's Degree in Computer Science**, *University of Salerno, Italy*, Title of Thesis (in Italian): *Java Stream Ciphers: progettazione e sviluppo di un'applicazione a scopo didattico per lo studio dei cifrari a flusso*.
21 December 2006

Other

- 2011 **Summer School, The 8th International Summer School on Software Engineering**, *University of Salerno, Fisciano, Italy*.
11-15 July 2011
- 2010 **Summer School, The 7th International Summer School on Software Engineering**, *University of Salerno, Fisciano, Italy*.
6-9 July 2010
- 2010 **Summer School, "Computational Intelligence Methods for Data Analysis in Oncology Bioinformatics"**, *Joint course of the International School on Neural Nets "E.R. Caianiello" and the Italian Network for Oncology Bioinformatics, Vietri sul Mare, Italy*.
24-29 May 2010

Italian Professorship Qualification (ASN)

- 2019 **Settore Scientifico Disciplinare: INF/01 INFORMATICA - Settore Concorsuale: 01/B1 INFORMATICA**, *Ministry of Research and University, Italy*.
Dr. Autilia Vitiello is qualified to act as Associate Professor at Italian universities from 11/09/2019.

Current Position

- 2022– present **Assistant Professor (in Italian: Ricercatore a t.d. - t.pieno art. 24 c.3-b L. 240/10)**, *Department of Physics "Ettore Pancini", University of Naples Federico II, Naples, Italy*.
28 July 2022 – present

Past Positions

- 2018 – 2022 **Assistant Professor (in Italian: Ricercatore a t.d. - t.pieno art. 24 c.3-a L. 240/10)**, *Department of Physics “Ettore Pancini”, University of Naples Federico II, Naples, Italy.*
20 December 2018 – 27 July 2022
- 2016 – 2018 **Research Fellow**, *Department of Computer Science, University of Salerno, Italy*, Research topic:
Smart methods for Big Data.
1 March 2016 – 18 December 2018
- 2013 – 2015 **Research Fellow**, *Department of Computer Science, University of Salerno, Italy*, Research topic:
Design for Semantic Information Processing.
1 July 2013 – 30 June 2015

Research Experience

- 2012 **Visiting PhD Student**, *School of Industrial Engineering, Information Systems, Eindhoven University of Technology, The Netherlands.*
3 September 2012 - 30 November 2012

Teaching Experience

- 2023 – 2024 **Module Leader**, *Machine Learning for Physicists - Master's Degree in Physics*, University of Naples Federico II, Italy.
AY 2023 – 2024
- 2023 – 2024 **Teaching Assistant**, *Computer Science - Bachelor's Degree in Physics*, University of Naples Federico II, Italy.
AY 2023 – 2024
- 2022 – 2023 **Module Leader**, *Machine Learning for Physicists - Master's Degree in Physics*, University of Naples Federico II, Italy.
AY 2022 – 2023
- 2022 – 2023 **Teaching Assistant**, *Computer Science - Bachelor's Degree in Physics*, University of Naples Federico II, Italy.
AY 2022 – 2023
- 2022 **Seminar**, *Unsupervised Machine Learning*, Smart Infrastructures Academy, University of Naples Federico II, Italy.
4 March 2022
- 2022 **Seminar**, *Computational Intelligence for Quantum Error Mitigation*, Master in Artificial Intelligence for Humanities, University of Naples Federico II, Italy.
21 January 2022
- 2021 – 2022 **Module Leader**, *Machine Learning for Physicists - Master's Degree in Physics*, University of Naples Federico II, Italy.
AY 2021 – 2022
- 2020 – 2021 **Teaching Assistant**, *Computer Science - Bachelor's Degree in Physics*, University of Naples Federico II, Italy.
AY 2020 – 2021
- 2020 – 2021 **Module Leader**, *Computational Intelligence - Master's Degree in Data Science (held in English)*, University of Naples Federico II, Italy.
AY 2020 – 2021
- 2019 – 2020 **Teaching Assistant**, *Computer Science - Bachelor's Degree in Physics*, University of Naples Federico II, Italy.
AY 2019 – 2020

- 2019 – 2020 **Module Leader**, *Computer Science - Bachelor's Degree in Physics (old degree)*, University of Naples Federico II, Italy.
AY 2019 – 2020
- 2018 – 2019 **Module Co-Leader**, *Cybernetics - Bachelor's Degree in Physics (old degree)*, University of Naples Federico II, Italy.
AY 2018 – 2019
- 2018 – 2019 **Teaching Assistant**, *Machine Learning for Physics - Master's Degree in Physics*, University of Naples Federico II, Italy.
AY 2018 – 2019
- 2018 – 2019 **Adjunct Professor**, *Data base I (class 1) - Bachelor's Degree in Computer Science*, University of Salerno, Italy.
AY 2018 – 2019
- 2017 – 2018 **Teaching Assistant**, *Object-oriented Programming for Physics - Master's Degree in Physics*, University of Naples Federico II, Italy.
AY 2017 – 2018
- 2017 – 2018 **Teaching Assistant**, *Computer Science - Bachelor's Degree in Physics (old degree)*, University of Naples Federico II, Italy.
AY 2017 – 2018
- 2017 – 2018 **Teaching Assistant**, *Data base I - Bachelor's Degree in Computer Science*, University of Salerno, Italy.
AY 2017 – 2018
- 2017 – 2018 **Teaching Assistant**, *Data base II - Master's Degree in Computer Science*, University of Salerno, Italy.
AY 2017 – 2018
- 2016 – 2017 **Teaching Assistant**, *Data base I - Bachelor's Degree in Computer Science*, University of Salerno, Italy.
AY 2016 – 2017
- 2014 – 2015 **Teaching Assistant**, *Foundations of Computer Science - Bachelor's Degree in Civil Engineering*, University of Salerno, Italy.
AY 2014 – 2015
- 2014 – 2015 **Teaching Assistant**, *Foundations of Computer Science - Bachelor's Degree in Chemical Engineering*, University of Salerno, Italy.
AY 2014 – 2015
- 2012 – 2013 **Teaching Assistant**, *Software Requirements Management: Quality and Functionality - Master's Degree*, Eindhoven University of Technology, The Netherlands.
AY 2012 – 2013
- 2012 **Seminar**, *Introduction to the Fuzzy Markup language*, held online in the context of the course Fuzzy Theory and Decision Analysis (Prof. Chang-Shing Lee), National University of Tainan, Taiwan.
16 April 2012
- 2011 – 2012 **Teaching Assistant**, *Foundations of Computer Science and Laboratory - Bachelor's Degree in Mathematics*, University of Salerno, Italy.
AY 2011 – 2012
- 2011 – 2012 **Tutoring activities (32 hours)**, *Operating Systems - Bachelor's Degree in Computer Science*, University of Salerno, Italy.
AY 2011 – 2012
- 2011 – 2012 **Tutoring activities (24 hours)**, *Programming I - Bachelor's Degree in Computer Science*, University of Salerno, Italy.
AY 2011 – 2012

- 2011 – 2012 **Tutoring activities (16 hours)**, *Computer Architecture - Bachelor's Degree in Computer Science*, University of Salerno, Italy.
AY 2011 – 2012
- 2010 – 2011 **Tutoring activities (24 hours)**, *Operating Systems - Bachelor's Degree in Computer Science*, University of Salerno, Italy.
AY 2010 – 2011
- 2010 – 2011 **Tutoring activities (12 hours)**, *Computer Science Laboratory - Bachelor's Degree in Physics*, University of Salerno, Italy.
AY 2010 – 2011
- 2010 – 2011 **Tutoring activities (12 hours)**, *Computer Architecture - Bachelor's Degree in Computer Science*, University of Salerno, Italy.
AY 2010 – 2011
- 2009 – 2010 **Teaching Assistant**, *Foundations of Computer Science - Bachelor's Degree in Law*, University Pegaso, Italy.
AY 2009 – 2010
- 2009 – 2010 **Teaching Assistant**, *Foundations of Computer Science - Bachelor's Degree in Science in Education and Training*, University Pegaso, Italy.
AY 2009 – 2010

Thesis Supervision

University of Naples Federico II, Italy

- 2024 **Supervisor**, *Bachelor's Degree in Physics*, Student: Edoardo Imparato, Thesis Title: Algoritmi genetici per l'Instance Selection nel Machine Learning.
Discussion date: 16 May 2024
- 2024 **Supervisor**, *Bachelor's Degree in Physics*, Student: Emanuele Ruoppolo, Thesis Title: Tecniche di machine learning per la gestione dei missing data: imputazione con regressione RandomForest.
Discussion date: 25 March 2024
- 2023 **Supervisor**, *Master's Degree in Physics*, Student: Claudia Verde, Thesis Title: Distributed Version of the Hybrid Quantum Genetic Algorithm.
Discussion date: 14 December 2023
- 2023 **Supervisor**, *Bachelor's Degree in Physics*, Student: Giuseppe Pierno, Thesis Title: Sensori Radar e Algoritmi di Neural Network & Machine Learning per il riconoscimento di Materiali.
Discussion date: 23 October 2023
- 2023 **Supervisor**, *Bachelor's Degree in Physics*, Student: Aniello Paolo Visone, Thesis Title: Applicazioni delle GAN alla Dimensionality Reduction.
Discussion date: 9 June 2023
- 2023 **Supervisor**, *Bachelor's Degree in Physics*, Student: Noemi Cicala, Thesis Title: Verso l'applicazione del differential evolution per la mitigazione dell'errore quantistico.
Discussion date: 16 March 2023
- 2023 **Supervisor**, *Bachelor's Degree in Physics*, Student: Antonio Rodrigo Murgia, Thesis Title: Applicazione di algoritmi genetici al problema dello sbilanciamento dei dati.
Discussion date: 16 March 2023
- 2022 **Supervisor**, *Master's Degree in Physics*, Student: Michele Vitiello, Thesis Title: Riconoscimento e classificazione di azioni criminali con l'utilizzo del deep learning.
Discussion date: 19 December 2022
- 2022 **Supervisor**, *Bachelor's Degree in Physics*, Student: Simone Sansalone, Thesis Title: EEG-Based Machine Learning Models for Engagement Recognition.
Discussion date: 19 December 2022

- 2022 **Supervisor**, *Bachelor's Degree in Physics*, Student: Claudia Costantini, Thesis Title: Reti neurali convoluzionali per la classificazione di impronte di scarpe sulla scena del crimine.
Discussion date: 8 June 2022
- 2021 **Supervisor**, *Bachelor's Degree in Physics*, Student: Daniele Petrillo, Thesis Title: Apprendimento di Reti Neurali attraverso la Particle Swarm Optimization.
Discussion date: 21 December 2021
- 2021 **Supervisor**, *Bachelor's Degree in Physics*, Student: Davide Zaccarella, Thesis Title: Tecniche di intelligenza computazionale per feature selection.
Discussion date: 21 December 2021
- 2021 **Supervisor**, *Bachelor's Degree in Physics*, Student: Luca Santagata, Thesis Title: Swarm Intelligence: implementazione e valutazione dell'Algoritmo Firefly.
Discussion date: 17 November 2021
- 2021 **Supervisor**, *Bachelor's Degree in Physics*, Student: Raffaele Sannino, Thesis Title: Implementazione e valutazione dell'Algoritmo Big Bang-Big Crunch.
Discussion date: 21 July 2021
- 2021 **Co-Supervisor**, *Master's Degree in Physics*, Student: Mauro Iacono (supervisor: Prof. Giovanni Acampora), Thesis Title: Fuzzy Neural Networks per Explainable Artificial Intelligence.
Discussion date: 21 July 2021
- 2021 **Co-Supervisor**, *Master's Degree in Physics*, Student: Angela Chiatto (supervisor: Prof. Giovanni Acampora), Thesis Title: Memetic algorithms for training variational quantum circuits in machine learning.
Discussion date: 17 March 2021
- 2020 **Supervisor**, *Bachelor's Degree in Physics*, Student: Esposito Marina, Thesis Title: Implementazione e valutazione di algoritmi memetici.
Discussion date: 20 March 2020
- 2020 **Co-Supervisor**, *Bachelor's Degree in Physics*, Student: Norcia Fabrizio (supervisor: Prof. Vincenzo Canale), Thesis Title: Applicazioni di tecniche di Machine Learning nell'analisi dei processi di Vector Boson Scattering nell'esperimento ATLAS.
Discussion date: 18 March 2020
- 2019 **Co-Supervisor**, *Bachelor's Degree in Physics*, Student: Nobile Alfredo (supervisor: Prof. Leonardo Merola), Thesis Title: Ricerca di nuove risonanze dibosoniche con metodi Machine Learning nell'esperimento ATLAS.
Discussion date: 16 December 2019
- 2019 **Co-Supervisor**, *Bachelor's Degree in Physics*, Student: Oliviero Veronica (supervisor: Prof. Leonardo Merola), Thesis Title: Applicazioni Machine Learning in processi di Vector Boson Scattering nell'esperimento ATLAS.
Discussion date: 16 December 2019
- 2019 **Co-Supervisor**, *Bachelor's Degree in Physics*, Student: Raffaele Mendoza (supervisor: Prof. Giovanni Acampora), Thesis Title: A quantum implementation of Support Vector Machine algorithm on IBM QX processors.
Discussion date: 25 October 2019
- 2019 **Co-Supervisor**, *Bachelor's Degree in Physics*, Student: Mariano Mollo (supervisor: Prof. Giovanni Acampora), Thesis Title: Implementazione di un algoritmo KNN multiclasse su hardware quantistico.
Discussion date: 25 October 2019
- 2019 **Co-Supervisor**, *Bachelor's Degree in Physics*, Student: Ciano Claudio (supervisor: Prof. Leonardo Merola), Thesis Title: Applicazioni Machine Learning per ricerche di nuova fisica nell'esperimento Atlas.
Discussion date: 17 July 2019

- 2018 **Daily Supervisor**, *Master's Degree in Computer Science*, Student: Alessandro Serrapica (supervisors: Prof. Francesco Cutugno and Prof. Giovanni Acampora), Thesis Title: Un dispositivo indossabile per l'analisi della scena del crimine basata su Bloodstain Pattern Analysis.
Discussion date: 12 July 2018
- 2018 **Daily Supervisor**, *Master's Degree in Computer Science*, Student: Mariangela Berardinelli (supervisors: Prof. Silvia Rossi and Prof. Giovanni Acampora), Thesis Title: Classificazione di segnali BCI con Support Vector Machine e Training Set Selection .
Discussion date: 26 March 2018
- 2017 **Daily Supervisor**, *Master's Degree in Computer Science*, Student: Pasquale D'Alterio (supervisors: Prof. Silvia Rossi and Prof. Giovanni Acampora), Thesis Title: Algoritmo memetico con modello ad isola per l'apprendimento di Interval Type-2 Fuzzy System.
Discussion date: October 2017
- [University of Salerno, Italy](#)
- 2021 **Daily Supervisor**, *Bachelor's Degree in Computer Science*, Student: Gennaro Alessio Robertazzi (supervisors: Prof.ssa Filomena Ferrucci and Prof. Giovanni Acampora), Thesis Title: A Web Application for Dataset Preprocessing in Quantum Machine Learning .
Discussion date: 18 February 2021
- 2016 **Co-Supervisor**, *Bachelor's Degree in Computer Science*, Student: Paolo Anastasio (supervisors: Prof.ssa Genoveffa Tortora and Prof. Michele Risi), Thesis Title: Twitter: Geolocalizzazione automatica di eventi.
Discussion date: July 2016

PhD Activities

2023 – present **Member of PhD Board (Collegio dei Docenti)**, *PhD in Computational Intelligence*, Department of Physics "Ettore Pancini", University of Naples Federico II, Italy.

Teaching

- 2019 **Module Leader**, *Evolutionary Computation and Applications - Ph.D. in Physics*, Department of Physics "Ettore Pancini", University of Naples Federico II, Italy.
8 February 2019 - 3 April 2019
- 2018 **Seminar**, *Introduction to the Machine Learning*, during the course Quantum Computing and Machine Learning (by prof. Acampora) in Ph.D. in Physics, University of Naples Federico II, Italy.
5 July 2018
- 2018 **Seminar**, *Theoretical Computer Science*, during the course Quantum Computing and Machine Learning (by prof. Acampora) in Ph.D. in Physics, University of Naples Federico II, Italy.
29 June 2018

Supervision Activity

- 2023 – present **Supervision**, *Ph.D. in Computational Intelligence, University of Naples Federico II, Italy*, Student Name: Alfredo Massa, Thesis topic: Quantum Generative Artificial Intelligence.
1 November 2023 – present
- 2023 – present **Co-Supervision**, *Ph.D. in Computational Intelligence, University of Naples Federico II, Italy*, Student Name: Alessandro Caraceni (supervisor: Prof. Giovanni Acampora), Thesis topic: Quantum Optimization Algorithms.
1 November 2023 – present
- 2022 – present **Co-Supervision**, *Ph.D. in Quantum Technologies, University of Naples Federico II, Italy*, Student Name: Angela Chiatto (supervisor: Prof. Giovanni Acampora), Thesis topic: Computational Intelligence for variational quantum circuits.
1 January 2022 – present

2019 – 2021 **Daily Supervision**, *Ph.D. in Quantum Technologies, University of Naples Federico II, Italy*, Student Name: Pratibha Raghupati Hegde (supervisors: Prof. Vittorio Cataudella and Prof. Giovanni Acampora), Thesis topic: Genetic algorithms for adiabatic quantum computing.
February 2019 – June 2021

2018 – 2021 **Co-Supervision**, *Ph.D. in Physics, University of Naples Federico II, Italy*, Student Name: Pasquale Trinchese (supervisor: Prof. Giovanni Acampora), Thesis Title: A portable EEG-BCI framework enhanced by machine learning techniques.
1st January 2018 - 27 July 2021

Member of Examination Boards

2021 **External Referee**, *PhD Course in Biosciences and Territory, University of Molise, Italy*, Candidate Name: Filippo Catalano, Thesis Title: Un Framework di Simulazione di Processi Industriali rappresentabili come sistemi interconnessi.
May 2021 – July 2021

Research Grants and Project Activities

Research Grants

2023 **Principal Investigator**, *Project Title: BLOODy crime reconStruction Through Artificial INtelligence (BLOODSTAIN)*, Fondo per il Programma Nazionale di Ricerca e Progetti di Rilevante Interesse Nazionale (PRIN), Total Amount: 208224 Euro.
funded by MUR

2022 – present **National Center Member**, *Dr. Autilia Vitiello has been selected by an evaluation board of the University of Naples Federico II to be part of the National Center 1 - Simulations, Computing and High Performance Data Analysis, Spoke 11 - Quantum Computing*, submitted in the context of Piano Nazionale di Ripresa e Resilienza (PNRR), Ministero dello sviluppo economico, Italy.
9 March 2022

2022 – 2023 **Principal Co-Investigator**, *Project Title: A Research Network for Quantum Machine Intelligence*, IEEE Computer Society, Amount funded: Euro 23.000,00.
4 March 2022 – July 2023

2021 – present **Conference Funding**, *for the international conference entitled "Quantum Techniques in Machine Learning 2022"*, Department of Physics "Ettore Pancini", University of Naples Federico II, Italy, Amount funded: Euro 2.000,00.
November 2021 – November 2022

2020 – present **Co-investigator**, *Project Title: AI Magister*, The project has been pre-selected by the Ministero per lo Sviluppo Economico (MISE) for participating to the call European Digital Innovation Hubs (DIGITAL-2021-EDIH-01), Coordinator: PROFIMA.
December 2020 – present

2020 – present **Aggregate Member - Fondi di Ricerca di Ateneo (FRA 2020 - UniNA)**, *Project Title: "FRONTIER - Forensic Robots for Holographic Reconstruction of Crime Dynamics in a post-Bloody Event Scenario"*, University of Naples Federico II, Italy, Amount funded: Euro 40.000,00.
December 2020 – present

2020 **Co-Investigator - H2020-SU-SEC-2020**, *Project Title: "Forensic RObots for iN-situ holographic reconsTruction of crlme dynamics in a post- bloody Event scenaRio" (FRONTIER)*, Principal Investigator: Prof. Giovanni Acampora, University of Naples Federico II, Italy.
Evaluated with success (total score: 10.5, threshold 10) but not funded

2019 – 2020 **Programma Erasmus+ 2019-2020**, *Mobility for teaching and research staff, University of Naples Federico II, Italy*, Amount funded: Euro 1.139,00, Unused financing due to covid-19 emergency.
July 2019 – September 2020

- 2019 – 2020 **Co-Investigator - H2020-EU.3.5.4. - Enabling the transition towards a green economy and society through eco-innovation H2020-WATER-2015**, *Project Title: "MAGIC - Moving Towards Adaptive Governance in Complexity: Informing Nexus Security"*, University of Naples Federico II, Italy, Amount funded: Euro 7.457.761,25.
March 2019 – September 2020
- 2019 – present **External Co-Investigator - RTI2018-098371-B-100, Ministerio de Economía y Competitividad - Spain**, *Project Title: Intelligent Distributed Processing Architectures in Fog Level for the IoT Paradigm (Smart-Fog)*, Principal Investigator: Prof. Joaquín Olivares, University of Cordoba, Spain, Amount funded: Euro 32.065,00.
January 2019 – September 2022
- 2018 – 2019 **Co-Investigator**, *Project Title: "GESTIWORLD - Sistema Integrato di Manutenzione Predittiva", AOO_IAI - AOO_Incentivi Fondo per la Crescita Sostenibile - Bando "HORIZON 2020" PON I&C 2014-2020*, Principal Investigator: Prof. Giovanni Acampora, University of Naples Federico II, Italy, Amount funded: Euro 300.000,00 as a consultancy activity requested by the ORION company, Padova, Italy.
September 2018 – May 2019

Referee for Research Grant Applications

- 2019 **Referee**, *Evaluator of ICT project proposals in the context of the program FARE – seconda edizione*, MIUR (Ministero dell'Istruzione, dell'Università e della Ricerca).
July 2019 – October 2019
- 2016 – 2017 **Referee**, *Evaluator of ICT project proposals in the context of the Chilean program FONDECYT Regular 2017 grant competition, an initiative of the Chilean National Science and Technology Commission*.
November 2016 – January 2017

Awards and Honors

- 2024 **Best Paper Award**, *2024 UK Workshop on Computational Intelligence (UKCI 2024)*, Paper Title: A Performance Study of Genetic Algorithms-based Quantum Approximate Optimisation in the Context of Power Networks (by A. Chiatto, A. Alizadeh, G. Acampora, A. Vitiello, A. Lotfi).
September 2024
- 2024 **Fujitsu Quantum Simulator Challenge Award**, *for applying a quantum fuzzy inference engine in the context of smart cities*, funded by Fujitsu.
January 2024
- 2022 **IEEE Computer Society Emerging Technology Grant**, *to initiate the creation of a new research network in the field of quantum artificial intelligence*, funded by IEEE Computer Society.
March 2022
- 2021 **Best Paper Award**, *2021 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2021)*, Paper Title: Error Mitigation in Quantum Measurement through Fuzzy C-Means Clustering (by G. Acampora and A. Vitiello).
July 2021
- 2021 **IBM Quantum Experience Academic Research Program Award**, *for the research activity on Quantum Genetic Evolution*, funded by IBM.
April 2021
- 2016 **IEEE-SA Working Group Chair Award for IEEE 1855**, *issued by the IEEE Standards Association for the role of standardization group secretary related to IEEE Std. 1855TM-2016*.
September 2016

- 2016 **IEEE-SA Certificate of Appreciation for the outstanding contribution to IEEE Std.1855™-2016**, issued by the IEEE Standards Association for the remarkable contribution to the realization of IEEE Std. 1855™-2016.
September 2016
- 2015 **Finalist at Webinars Competition**, 2015 IEEE CIS Webinars Competition for Students and Professionals – Real World Applications and Emerging Topics in Computational Intelligence, IEEE Computational Intelligence Society, Webinar Title: E-commerce data integration through nature-inspired algorithms.
11 November 2015
- 2012 **Best Paper Award**, 2012 UK Workshop on Computational Intelligence (UKCI 2012), Paper Title: Hybridizing Genetic Algorithms and Hill Climbing for Similarity Aggregation in Ontology Matching (by G. Acampora, U. Kaymak, V. Loia, A. Vitiello).
September 2012

Standards and Patents

- 2021 – present **Standardization Activity**, IEEE 2976 for XAI – eXplainable Artificial Intelligence - for Achieving Clarity and Interoperability of AI Systems Design, Role: Chair of the Standardization Working Group, IEEE Standards Association.
April 2021 – present
- 2013 – present **Standardization Activity**, IEEE Std 1855 for Fuzzy Markup Language, Role: Secretary of the Standardization Working Group, IEEE Standards Association.
January 2013 – present
- 2013 – 2016 **Development of Patents and Standards**, Dr. Vitiello gave a remarkable contribution to the standardization activities related to IEEE Std 1855, the first IEEE standard technology released in the field of computational intelligence and fuzzy logic, Published on May 27th, 2016, <http://ieeexplore.ieee.org/document/7479441/>.
January 2013 – May 2016

Technology Transfer

- 2021 – present **Involvement in the launch of new companies**, Dr. Vitiello is a founding partner of QuantumNet, a pioneering Italian start-up in the field of quantum computing and artificial intelligence.
June 2021 – present

Leadership and Participation in Research Groups

International Research Groups

- 2024 – present **International Committee Chairman**, Vice-Chair of IEEE Computational Intelligence Society Standards Committee.
August 2024 – present
- 2022 **IEEE Senior Member**.
February 2022 – present
- 2020 – 2021 **International Committee Chairman**, Vice-Chair of IEEE Computational Intelligence Society Standards Committee.
January 2020 – December 2021
- 2020 **International Committee Membership**, IEEE Computational Intelligence Society Nominations Committee.
January 2020 - December 2020
- 2018 - 2019 **International Committee Chairman**, Chair of IEEE Computational Intelligence Society Standards Committee.
January 2018 – December 2019

2018 – **Participation in International Research Groups**, *Collaboration with the research group of the present Prof. Francisco Herrera, University of Granada, Spain.*

2018 – **Participation in International Research Groups**, *Collaboration with the research group of the present Prof. Jesus Alcala-Fdez, University of Granada, Spain.*

2018 – **International Committee Membership**, *Member of the IEEE Computational Intelligence Society present Technical Committee on Fuzzy Systems.*
January 2018 – present

2017 **International Committee Membership**, *IEEE Computational Intelligence Society Multimedia Committee.*
January 2017 - December 2017

2016 – 2017 **International Committee Chairman**, *Vice-Chair of IEEE Computational Intelligence Society Standards Committee.*
January 2016 – December 2017

2015 – **Participation in International Research Groups**, *Collaboration with the research group of the present Prof. Hani Hagra, University of Essex, United Kingdom.*

2015 – **International Committee Membership**, *IEEE Computational Intelligence Society Standards present Committee.*
January 2015 – present

2014 – **Participation in International Research Groups**, *Collaboration with the research group of the present Prof. Witold Pedrycz, University of Alberta, Canada.*

2014 – **Participation in International Research Groups**, *Collaboration with the with the research present group of the Prof. Hisao Ishibuchi, Osaka Prefecture University, Japan.*

2014 – **Participation in International Research Groups**, *Collaboration with the research group of the present Prof. Marek Reformat, University of Alberta, Canada.*

2012 – **International Research Groups**, *Collaboration with the research group of the Prof. Uzey present Kaymak, Eindhoven University of Technology, The Netherlands.*

2012 – **Participation in International Research Groups**, *Collaboration with the research group of present Prof. Chang-Shing Lee, University of Tainan, Taiwan.*

[National Research Groups](#)

2022 – **Participation in National Research Groups**, *Assignment of Scientific Association, CSN Group present I, Istituto Nazionale di Fisica Nucleare (INFN), Sezione di Napoli.*
January 2022 – December 2022

2021 – **Participation in National Research Groups**, *Collaboration with the research group of the Prof. present Andrea Prota, University of Naples Federico II, Italy.*

2019 – **National Committee Membership**, *Member of ICAROS (Interdepartmental Center for Advances present in RObotic Surgery), University of Naples Federico II.*
October 2019 – present

2018 – **Participation in National Research Groups**, *Collaboration with the research group of the Prof. present Roberta Siciliano, University of Naples Federico II, Italy.*

2017 – **Participation in National Research Groups**, *Collaboration with the PRISMA Laboratory of present the Prof. Bruno Siciliano, University of Naples Federico II, Italy.*

2016 – **Participation in National Research Groups**, *Collaboration with the research group of the Prof. present Genoveffa Tortora, University of Salerno , Italy.*

2016 – **Laboratory Member**, *QUAntum computing and SmARt Systems (QUASAR), University of present Naples Federico II.*
June 2016 – present

2014 – **Participation in International Research Groups**, *Collaboration with the research group of present Luciano Garofano, Past Commander Carabinieri RIS Parma, Italy.*

Editorial Activities

2022 – **Guest Editor**, *Special Issue on Occupational Safety and Construction Project Management*, present Sustainability, MDPI.
January 2022 – present

2021 – **Editor of Conference Proceedings**, *The 24th International Conference on Information Visualization 2020*, 7-11 September 2020, Melbourne, Australia.
March 2021 – present

2020 – **Advisory Board Member**, *Journal of Fuzzy Extension & Applications*, Ayandegan Institute of present Higher Education, Iran.
7 September 2020 – present

2019 – **Editor of Conference Proceedings**, *The 23rd International Conference on Information Visualization 2019*, 2-5 July 2019, Paris, France.
August 2019 – present

2018 – **Editorial Board Member**, *Scientific Programming*, Hindawi.
present 29 March 2018 – present

2018 – **Editorial Board Member**, *Quantum Machine Intelligence*, Springer.
present 20 March 2018 – present

2017 – **Book Editor**, *Computational Intelligence for Semantic Knowledge Management*, Studies in present Computational Intelligence 837, Springer, Co-editors: altri editor: Giovanni Acampora, Witold Pedrycz and Athanasios Vasilakos.
1 June 2017 – present

2011 – **Journal Reviewer**, *Since 2011, Dr. Vitiello has acted as reviewer for several international present journals such as*, IEEE Transactions on Fuzzy Systems (IEEE), Memetic Computing (Springer), Applied Soft Computing (Elsevier), Soft Computing (Springer), Pervasive and Mobile Computing (Elsevier), Journal of Ambient Intelligence and Humanized Computing (Springer), Expert Systems With Applications (Elsevier), Scientific Programming (Hindawi), Computers & Operations Research (Elsevier), Helyion (Elsevier), Engineering Science and Technology: an International Journal (Elsevier), International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems (World Scientific), Swarm and Evolutionary Computation (Elsevier), Data Science and Engineering (Springer), Journal of Instrumentation (IOPscience), IEEE Access (IEEE), PLOS ONE (Public Library of Science), Computational Intelligence and Neuroscience (Hindawi), International Journal of Approximate Reasoning (Elsevier), International Journal of Computational Intelligence Systems (ATLANTIS PRESS), Quantum Machine Intelligence (Springer), Multimedia Tools and Applications (Springer), Journal of Data and Information Quality (ACM), IEEE Transactions on Cybernetics (IEEE), International Journal of Intelligent Systems (Wiley), Engineering Reports (Wiley), Automation in Construction (Elsevier), Artificial Intelligence (Elsevier), Algorithms (MDPI).

Invited Talks

2023 **Invited Speaker**, *VII Congresso Nazionale Accademia Italiana di Scienze Forensi, Online Conference*, Invited by Luciano Garofano - Chair of the Accademia Italiana di Scienze Forensi, Talk Title (in Italian): Intelligenza artificiale sulla scena del crimine: un approccio innovativo per la visualizzazione, la raccolta e l'analisi di tracce e reperti di interesse forense .
2 December 2023

- 2022 **Invited Speaker**, *VI Congresso Nazionale Accademia Italiana di Scienze Forensi, Online Conference*, Invited by Luciano Garofano - Chair of the Accademia Italiana di Scienze Forensi, Talk Title: Probabilistic Reasoning in Crime Investigation.
12 November 2022
- 2022 **Invited Speaker**, *QuantumNet Workshop at Quantum Business Europe 2022, Online Conference*, Invited by Alfredo Troiano - Scientific Manager of QuantumNet, Talk Title: Quantum Computing meets Artificial Intelligence: a Key Convergence.
23 March 2022
- 2022 **Invited Speaker**, *RAILS Mid-Term Workshop, Online Conference*, Invited by Valeria Vittorini - RAILS Project Coordinator, Talk Title: The need for Standard XAI (Explainable Artificial Intelligence).
25 February 2022
- 2022 **Invited Panelist**, *RAILS Mid-Term Workshop, Online Conference*, Invited by Valeria Vittorini - RAILS Project Coordinator, Panel Title: Discussion about the challenges for a fast take-up of AI in railways.
25 February 2022
- 2021 **Invited Speaker**, *V Congresso Nazionale Accademia Italiana di Scienze Forensi, Online Conference*, Invited by Lorenzo Marchesini - Vice-chair of the Accademia Italiana di Scienze Forensi, Talk Title (in Italian): La Realtà aumentata nelle scienze forensi. Tecnologie, stato dell'arte e potenziali applicazioni.
10 December 2021
- 2021 **Invited Speaker**, *Conference on Big Data for Small Area Estimation 2021 (SAE 2021), Online Conference*, Invited by Roberta Siciliano - Chair of SAE 2021 Programme Committee, Talk Title: Error Mitigation in Quantum Measurement through Fuzzy C-Means Clustering.
24 September 2021
- 2021 **Invited Speaker**, *NetCom Group SpA, online talk*, Invited by Alfredo Troiano - Chief Technical Officer at NetCom Group SpA, Talk Title: Standard IEEE 1855-2016: Fuzzy Markup Language.
26 March 2021
- 2020 **Invited Speaker**, *IV Congresso Nazionale Accademia Italiana di Scienze Forensi, Online Conference*, Invited by Lorenzo Marchesini - Vice-chair of the Accademia Italiana di Scienze Forensi, Talk Title (in Italian): Intelligenza Artificiale applicata alle Scienze Forensi - Parte 2.
11 December 2020
- 2019 **Invited Speaker**, *III Congresso Nazionale Accademia Italiana di Scienze Forensi, Turin, Italy*, Invited by Lorenzo Marchesini - Vice-chair of the Accademia Italiana di Scienze Forensi, Talk Title: Machine Learning meets Bloodstain Pattern Analysis.
26 September 2019
- 2018 **Invited Speaker**, *II Congresso Nazionale Accademia Italiana di Scienze Forensi, Rome, Italy*, Invited by Lorenzo Marchesini - Vice-chair of the Accademia Italiana di Scienze Forensi, Talk Title (in Italian): Bloodstain Pattern Analysis: un Approccio Informatico.
28 September 2018
- 2018 **Invited Speaker**, *Innovation Village, Naples, Italy*, Invited by Ottavio Lucarelli - Chair of Ordine Giornalisti Napoli, Talk Title (in Italian): Il ruolo della computer vision nella investigazioni forensi e nella divulgazione di fatti di cronaca.
7 April 2018
- 2017 **Invited Tutorial Speaker**, *2017 IEEE Conference on Fuzzy Systems (Fuzz-IEEE 2017), Naples, Italy*, Invited by Prof. Oscar Cordon - Tutorial Chair of Fuzz-IEEE 2017, Tutorial Title: Tutorial on Software for Fuzzy Computing.
9 July 2017

- 2012 **Invited Seminar**, *School of Industrial Engineering, Information Systems, Eindhoven University of Technology, Eindhoven, the Netherlands*, Invited by Prof. Uzay Kaymak, Seminar Title: Memetic Algorithms for Ontology Alignment.
29 November 2012
- 2012 **Invited Webinar Speaker**, *IEEE Computational Intelligence Webinars*, Online Tutorial, Tutorial Title: On the Temporal Granularity in Fuzzy Cognitive Maps.
30 October 2012

Conference Activities

Participation to Organizing Committees

- 2023 **General co-Chair**, *Workshop on Quantum Artificial Intelligence (QAI 2023)*, Naples, Italy.
27-28 July 2023
- 2023 **Area Chair**, *The 35th IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2023)*, Atlanta, USA.
6 - 8 November 2023
- 2022 **General co-Chair**, *Quantum Techniques in Machine Learning (QTML 2022)*, Naples, Italy.
8-11 November 2022
- 2022 **Area Chair**, *The 34th IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2022)*, virtually.
31 October - 2 November 2022
- 2022 **Symposium Co-chair**, *15th International Symposium Visual Analytics and Data Science*, in 26th International Conference on Information Visualization (IV 2022), Austria, Vienna.
19-22 July 2022
- 2022 **Poster Session Chair**, *IEEE World Congress on Computational Intelligence (WCCI 2022)*, Padova, Italy.
18-23 July 2022
- 2022 **Special Session Organizer**, *Special Session on Fuzzy Technologies for Web Intelligence and Internet of Things*, *IEEE World Congress on Computational Intelligence (WCCI 2022)*, other organizers: Prof. Marek Reformat, Prof. Chang-Shing Lee, Prof. Giovanni Acampora, Padova, Italy.
18-23 July 2022
- 2022 **Special Session Organizer**, *Special Session on Quantum Computational Intelligence*, *IEEE World Congress on Computational Intelligence (WCCI 2022)*, other organizers: Prof. Giovanni Acampora, Padova, Italy.
18-23 July 2022
- 2021 **Program Committee Member**, *The 2021 RIVF International Conference on Computing and Communication Technologies (RIVF 2021)*, Hanoi, Vietnam.
2-4 December 2021
- 2021 **Special Session Chair**, *Quantum Cybernetics and Machine Learning*, 2021 IEEE International Conference On Systems, Man, and Cybernetics (SMC 2021), virtual conference.
20 October 2021
- 2021 **Program Committee Member**, *2021 IEEE International Conference On Systems, Man, and Cybernetics (SMC 2021)*, Melbourne, Australia.
17-20 October 2021
- 2021 **Organizing Committee Member**, *Conference on Big Data for Small Area Estimation (SAE 2021)*, Naples, Italy, Online conference.
20-24 September 2021

- 2021 **Special Session Chair**, *Computational Web Intelligence*, 2021 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2021), Luxembourg.
12 July 2021
- 2021 **Program Committee Member**, *2021 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2021)*, Luxembourg.
11-14 July 2021
- 2021 **Symposium Co-chair**, *14th International Symposium Visual Analytics and Data Science*, in 25th International Conference on Information Visualization (IV 2021), Sidney, Australia, Online Conference.
5-9 July 2021
- 2020 **Regular Session Chair**, *Swarm Intelligence 2 (WeBT2)*, 2020 IEEE International Conference on Systems, Man, and Cybernetics (SMC), Online Conference.
14 October 2020
- 2020 **Regular Session Chair**, *Human Machine Interface (TuBT10)*, 2020 IEEE International Conference on Systems, Man, and Cybernetics (SMC), Online conference.
13 October 2020
- 2020 **Program Committee Member**, *the 2020 RIVF International Conference on Computing and Communication Technologies (RIVF 2020)*, Ho Chi Minh City, Vietnam.
14-15 October 2020
- 2020 **Special Session Chair**, *IV20_2.8: Visual Analytics and Data Science (VA4)*, Conference Information Visualization 2020, Online conference.
8 September 2020
- 2020 **Symposium Co-chair**, *13rd International Symposium Visual Analytics and Data Science*, in 24th International Conference on Information Visualization (IV 2020), Online Conference.
7-11 September 2020
- 2020 **Local Arrangement Co-Chair**, *The 29th IEEE International Conference on Robot & Human Interactive Communication, Naples, Italy*.
31 August - 4 September 2020
- 2020 **Special Session Organizer**, *Special Session on Computational Web Intelligence*, The 2020 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2020), other organizers: Prof. Marek Reformat, Prof. Chang-Shing Lee, Prof. Amir Pourabdollah and Prof. Giovanni Acampora.
19-24 July 2020
- 2020 **Program Committee Member**, *2020 International Conference on Fuzzy Systems (FUZZ-IEEE 2020)*, Glasgow, UK.
19-24 July 2020
- 2019 **Program Committee Member**, *2019 the IEEE International Conference On Systems, Man, and Cybernetics (SMC 2019)*, Bari, Italy.
6-9 October 2019
- 2019 **Symposium Co-chair**, *12th International Symposium Visual Analytics*, in 23rd International Conference on Information Visualization (IV 2019), Paris, France.
2-5 July 2019
- 2019 **Program Committee Member**, *2019 International Conference on Fuzzy Systems (FUZZ-IEEE 2019)*, New Orleans, Louisiana, USA.
23-26 June 20219
- 2019 **Program Committee Member**, *The 2019 IEEE-RIVF International Conference on Computing and Communication Technologies (RIVF 2019)*, Danang, Vietnam.
20-22 March 2019

- 2018 **Program Committee Member**, *2018 the IEEE International Conference On Systems, Man, and Cybernetics (SMC 2018)*, Miyazaki, Japan.
7-10 October 2018
- 2018 **Special Session Organizer**, *Special Session on Business Processes and Fuzzy Logic (BPFL), 2018 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2018)*, other organizers: Dr. Mario Luca Bernardi and Prof. Marta Cimitile, Rio de Janeiro, Brasil.
8-13 July 2018
- 2018 **Special Session Chair**, *Fuzzy Cognitive Maps*, 2018 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2018), Rio de Janeiro, Brasile.
8-13 July 2018
- 2018 **Special Session Chair**, *Software for Soft Computing*, 2018 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2018), Rio de Janeiro, Brasile.
8-13 July 2018
- 2018 **Program Committee Member**, *2018 International Joint Conference on Neural Networks (IJCNN 2018)*, Rio de Janeiro, Brasil.
8-13 July 2018
- 2018 **Technical Program Committee Member**, *2018 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2018)*, Rio de Janeiro, Brasil.
8-13 July 2018
- 2017 **Program Committee Member**, *Competition Human & Smart Machine Co-Learning @ IEEE SMC 2017, 2017 IEEE International Conference on Systems, Man, And Cybernetics (SMC 2017)*, Banff, Canada. .
5-8 October 2017
- 2017 **Program Committee Member**, *2017 the IEEE International Conference On Systems, Man, and Cybernetics (SMC 2017)*, Banff, Canada.
5-8 October 2017
- 2017 **Program Committee Member**, *Competition FML-based Machine Learning Competition for Human Prediction and Application on Game of Go @ FUZZ-IEEE 2017, 2017 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2017)*, Naples, Italy.
9-12 July 2017
- 2017 **Finance chair**, *2017 IEEE Conference on Fuzzy Systems (Fuzz-IEEE 2017)*, Naples, Italy.
9-12 July 2017
- 2017 **Program Committee Member**, *2017 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2017)*, Naples, Italy.
9-12 July 2017
- 2016 **Program Committee Member**, *the 12-th IEEE-RIVF International Conference on Computing and Communication Technologies (RIVF 2016)*, Hanoi, Vietnam.
7-9 November 2016
- 2016 **Poster Session Chair**, *2016 IEEE International Conference On Systems, Man, And Cybernetics (SMC 2016)*, Budapest, Hungary.
10 October 2016
- 2016 **Program Committee Member**, *2016 the IEEE International Conference On Systems, Man, and Cybernetics (SMC 2016)*, Budapest, Hungary.
9-12 October 2016
- 2016 **Program Committee Member**, *2016 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2016)*, Vancouver, Canada.
25-29 July 2016

- 2016 **Program Committee Member**, *The Eighth International Conference on Advanced Cognitive Technologies and Applications (COGNITIVE 2016)*, Rome, Italy.
20-24 March 2016
- 2015 **Technical Program Committee Member**, *2015 IEEE Symposium Series on Computational Intelligence (SSCI 2015)*, Cape Town, South Africa.
7-10 December 2015
- 2015 **Program Committee Member**, *2015 the IEEE International Conference On Systems, Man, And Cybernetics (SMC 2015)*, Hong-Kong.
9-12 October 2015
- 2015 **Program Committee Member**, *the 11-th IEEE-RIVF International Conference on Computing and Communication Technologies (RIVF 2015)*, Can Tho City, Vietnam.
25-28 February 2015
- 2014 **Program Committee Member**, *2014 the IEEE International Conference On Systems, Man, And Cybernetics (SMC 2014)*, San Diego, USA.
5-8 October 2014
- 2014 **Program Committee Member**, *The Eighth International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing (IMIS-2014)*, Birmingham, UK.
2-4 July 2014
- 2013 **Program Committee Member**, *2013 the IEEE International Conference On Systems, Man, and Cybernetics (SMC 2013)*, Manchester, UK.
13-16 October 2013

Talks

- 2022 **Tutorial Speaker**, *Implementing Evolutionary Optimization on Actual Quantum Processors*, 2022 IEEE International Conference on Systems, Man, and Cybernetics (SMC), Prague, Czech Republic.
9 October 2022
- 2021 **Speaker**, *Using Fuzzy C-Means for Error Mitigation in Quantum Measurement*, The 13th International Workshop on Fuzzy Logic and Applications (WILF 2021), Vietri sul Mare, Italy.
20 December 2021
- 2021 **Speaker**, *Genetic Algorithms based on Bhattacharyya Distance for Quantum Measurement Error Mitigation*, 2021 IEEE International Conference on Systems, Man, and Cybernetics (SMC), virtual Conference.
20 October 2021
- 2021 **Speaker**, *Applying Density-based Clustering for Bloodstain Pattern Analysis*, 2021 IEEE International Conference on Systems, Man, and Cybernetics (SMC), virtual Conference.
18 October 2021
- 2021 **Speaker**, *Error Mitigation in Quantum Measurement through Fuzzy C-Means Clustering*, 2021 IEEE Conference on Fuzzy Systems, Fuzz-IEEE 2021, virtual conference.
13 July 2021
- 2021 **Speaker**, *Genetic Algorithms for Error Mitigation in Quantum Measurement*, 2021 IEEE Congress on Evolutionary Computation, CEC 2021, virtual conference.
1 July 2021
- 2020 **Speaker**, *TSSweb: a Web Tool for Training Set Selection*, The 2020 International Conference on Fuzzy Systems (FUZZ-IEEE 2020), online.
20 July 2020

- 2020 **Speaker**, *MIDA: a Web Tool for Missing Data Imputation based on a Boosted and Incremental Learning Algorithm*, The 2020 International Conference on Fuzzy Systems (FUZZ-IEEE 2020), online.
20 July 2020
- 2018 **Speaker**, *On Quantum Implementation of Fuzzy Systems*, Quantum@univr, Verona, Italia.
25 October 2018
- 2018 **Speaker**, *A Proposal for a Quantum Implementation of Fuzzy Systems*, XIII Workshop on Artificial Life and Evolutionary Computation (WIVACE 2018), Parma, Italy.
11 September 2018
- 2018 **Speaker**, *Learning Type-2 Fuzzy Rule-Based Systems through Memetic Algorithms*, 2018 IEEE International Conference on Fuzzy Systems (Fuzz-IEEE 2018), Rio de Janeiro, Brasile.
8-13 July 2018
- 2017 **Speaker**, *Extending IEEE Std 1855 for designing ArduinoTM-based fuzzy systems*, 2017 IEEE International Conference on Fuzzy Systems (Fuzz-IEEE 2017), Napoli, Italy.
12 July 2017
- 2017 **Speaker**, *An Intelligent Framework for Predicting State War Engagement from Territorial Data*, The 12th International Conference on Green, Pervasive and Cloud Computing, Cetara, Italy.
11 May 2017
- 2016 **Speaker**, *Comparison of Multi-objective Evolutionary Algorithms for prototype selection in nearest neighbor classification*, 2016 IEEE Symposium Series on Computational Intelligence (SSCI 2016), Atene, Grecia.
8 December 2016
- 2016 **Speaker**, *Applying SPEA2 to Prototype Selection for Nearest Neighbor Classification*, The 2016 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2016), Budapest, Ungheria.
10 October 2016
- 2014 **Speaker**, *Enhancing an Aml-based Framework for U-commerce by applying Memetic Algorithms to Plan Shopping*, 6-th International Conference on Intelligent Networking and Collaborative Systems (INCOS 2014), Salerno, Italy.
10 September 2014
- 2011 **Speaker**, *Improving ontology alignment through memetic algorithms*, 2011 IEEE International Conference on Fuzzy Systems (Fuzz-IEEE 2011), Taipei, Taiwan.
29 June 2011
- 2011 **Speaker**, *Towards application of FML in suspicion of non-common diseases*, 2011 IEEE International Conference on Fuzzy Systems (Fuzz-IEEE 2011), Taipei, Taiwan.
29 June 2011
- 2011 **Speaker**, *Exploiting Timed Automata based Fuzzy Controllers for voltage regulation in Smart Grids*, 2011 IEEE International Conference on Fuzzy Systems (Fuzz-IEEE 2011), Taipei, Taiwan.
27 June 2011

Member of Boards for Appointments and Promotions

- 2021 **Chairman of Recruiting Committee**, *appointment to Research Scholar – Winner Candidate Name: Pasquale Trinchese*, University of Naples Federico II.
Research Fund Manager: Prof. Giovanni Acampora

Participation in Academic Governance Activities

- April 2021 **Participation in Research Assessment Frameworks**, *Valutazione della Qualità della Ricerca 2015-2019 (VQR 2015-2019)*, University of Naples Federico II, Italy.

Publications

In Journal Articles

- 2024 Halima G. Ahmad, Roberto Schiattarella, Pasquale Mastrovito, Angela Chiatto, Anna Levochkina, Martina Esposito, Domenico Montemurro, Giovanni P. Pepe, Alessandro Bruno, Francesco Tafuri, Autilia Vitiello, Giovanni Acampora, and Davide Massarotti. Mitigating errors on superconducting quantum processors through fuzzy clustering. *Advanced Quantum Technologies*, volume 7, 2024.
- 2024 Giovanni Acampora, Carlos Cano Gutiérrez, Angela Chiatto, José Manuel Soto Hidalgo, and Autilia Vitiello. Evovaq: Evolutionary algorithms-based toolbox for variational quantum circuits. *SoftwareX*, volume 26, 2024.
- 2023 Francesco Amato, Matteo Cicalese, Luca Contrasto, Giacomo Cubicciotti, Gerardo D'Ambola, Antonio La Marca, Giuseppe Pagano, Fiorentino Tomeo, Gennaro Alessio Robertazzi, Gabriele Vassallo, Giovanni Acampora, Autilia Vitiello, Gemma Catolino, Giammaria Giordano, Stefano Lambiase, Valeria Pontillo, Giulia Sellitto, Filomena Ferrucci, and Fabio Palomba. Quantummoonlight: A low-code platform to experiment with quantum machine learning. *SoftwareX*, volume 22, 2023.
- 2023 Giovanni Acampora and Autilia Vitiello. Improving quantum genetic optimization through granular computing. *Granular Computing*, volume 8, page 709 – 729, 2023.
- 2023 Giovanni Acampora, Roberto Schiattarella, and Autilia Vitiello. On the implementation of fuzzy inference engines on quantum computers. *IEEE Transactions on Fuzzy Systems*, volume 31, page 1419 – 1433, 2023.
- 2023 Giovanni Acampora, Ferdinando Di Martino, Alfredo Massa, Roberto Schiattarella, and Autilia Vitiello. D-nisq: A reference model for distributed noisy intermediate-scale quantum computers. *Information Fusion*, volume 89, page 16 – 28, 2023.
- 2023 Giovanni Acampora, Angela Chiatto, and Autilia Vitiello. Training circuit-based quantum classifiers through memetic algorithms. *Pattern Recognition Letters*, volume 170, page 32 – 38, 2023.
- 2023 Giovanni Acampora, Angela Chiatto, and Autilia Vitiello. Genetic algorithms as classical optimizer for the quantum approximate optimization algorithm. *Applied Soft Computing*, volume 142, 2023.
- 2022 Annalisa Mele, Autilia Vitiello, Manuela Bonano, Andrea Miano, Riccardo Lanari, Giovanni Acampora, and Andrea Prota. On the joint exploitation of satellite dinsar measurements and dbscan-based techniques for preliminary identification and ranking of critical constructions in a built environment. *Remote Sensing*, volume 14, 2022.
- 2022 Giovanni Acampora, Roberto Schiattarella, and Autilia Vitiello. Using quantum amplitude amplification in genetic algorithms. *Expert Systems with Applications*, volume 209, 2022.
- 2021 María Martínez-Rojas, María José Gacto, Autilia Vitiello, Giovanni Acampora, and Jose Manuel Soto-Hidalgo. An internet of things and fuzzy markup language based approach to prevent the risk of falling object accidents in the execution phase of construction projects. *Sensors*, volume 21, page 6461. Multidisciplinary Digital Publishing Institute, 2021.
- 2021 Giovanni Acampora and Autilia Vitiello. Implementing evolutionary optimization on actual quantum processors. *Information Sciences*, volume 575, pages 542–562, 2021.
- 2021 Giovanni Acampora, Pasquale Trinchese, and Autilia Vitiello. A dataset of eeg signals from a single-channel ssvep-based brain computer interface. *Data in Brief*, volume 35, page 106826, 2021.
- 2021 Giovanni Acampora, Vittorio Cataudella, Pratibha Raghupati Hegde, Procolo Lucignano, Gianluca Passarelli, and Autilia Vitiello. Memetic algorithms for mapping p-body interacting systems in effective quantum 2-body hamiltonians. *Applied Soft Computing*, volume 110, page 107634, 2021.

- 2020 Giovanni Acampora, Paolo Anastasio, Michele Risi, Genoveffa Tortora, and Autilia Vitiello. Automatic event geo-location in twitter. *IEEE Access*, volume 8, pages 128213–128223, 2020.
- 2019 José M. Soto-Hidalgo, Autilia Vitiello, José Maria Alonso, Giovanni Acampora, and Jesús Alcalá-Fdez. Design of fuzzy controllers for embedded systems with JFML. *International Journal of Computational Intelligence Systems*, volume 12, pages 204–214, 2019.
- 2019 Abduladem Aljamel, Taha Osman, Giovanni Acampora, Autilia Vitiello, and Ziqi Zhang. Smart information retrieval: Domain knowledge centric optimization approach. *IEEE Access*, volume 7, pages 4167–4183, 2019.
- 2019 Giovanni Acampora, Vittorio Cataudella, P. R. Hegde, P. Lucignano, Gianluca Passarelli, and Autilia Vitiello. An evolutionary strategy for finding effective quantum 2-body hamiltonians of p -body interacting systems. *Quantum Machine Intelligence*, volume 1, pages 113–122, 2019.
- 2018 Giovanni Acampora, Francisco Herrera, Genoveffa Tortora, and Autilia Vitiello. A multi-objective evolutionary approach to training set selection for support vector machine. *Knowledge Based Systems*, volume 147, pages 94–108, 2018.
- 2017 Giovanni Acampora, Autilia Vitiello, Bruno N. Di Stefano, Wil M. P. van der Aalst, Christian W. Günther, and Eric Verbeek. IEEE 1849: The XES standard: The second IEEE standard sponsored by IEEE computational intelligence society [society briefs]. *IEEE Computational Intelligence Magazine*, volume 12, pages 4–8, 2017.
- 2016 Autilia Vitiello, Ciro Di Nunzio, Luciano Garofano, Maurizio Saliva, Pietrantonio Ricci, and Giovanni Acampora. Bloodstain pattern analysis as optimisation problem. *Forensic Science International*, volume 266, pages e79–e85. Elsevier, 2016.
- 2016 Francesco Orciuoli, Mimmo Parente, and Autilia Vitiello. Solving the shopping plan problem through bio-inspired approaches. *Soft Computing*, volume 20, pages 2077–2089. Springer, 2016.
- 2016 Giovanni Acampora, Bruno N. Di Stefano, and Autilia Vitiello. IEEE 1855tm: The first IEEE standard sponsored by IEEE computational intelligence society [society briefs]. *IEEE Computational Intelligence Magazine*, volume 11, pages 4–6, 2016.
- 2016 Giovanni Acampora, Daniyal M. Al-Ghazzawi, Hani Hagrass, and Autilia Vitiello. An interval type-2 fuzzy logic based framework for reputation management in peer-to-peer e-commerce. *Information Sciences*, volume 333, pages 88–107, 2016.
- 2015 Giovanni Acampora, Witold Pedrycz, and Autilia Vitiello. A competent memetic algorithm for learning fuzzy cognitive maps. *IEEE Transactions on Fuzzy Systems*, volume 23, pages 2397–2411, 2015.
- 2013 Giovanni Acampora and Autilia Vitiello. Interoperable neuro-fuzzy services for emotion-aware ambient intelligence. *Neurocomputing*, volume 122, pages 3–12, 2013.
- 2013 Giovanni Acampora, Vincenzo Loia, and Autilia Vitiello. Enhancing ontology alignment through a memetic aggregation of similarity measures. *Information Sciences*, volume 250, pages 1–20, 2013.
- 2012 Giovanni Acampora, Vincenzo Loia, and Autilia Vitiello. Improving game bot behaviours through timed emotional intelligence. *Knowledge Based Systems*, volume 34, pages 97–113, 2012.
- 2012 Giovanni Acampora, Vincenzo Loia, Saverio Salerno, and Autilia Vitiello. A hybrid evolutionary approach for solving the ontology alignment problem. *International Journal of Intelligent Systems*, volume 27, pages 189–216, 2012.
- 2012 Giovanni Acampora, Chang-Shing Lee, Autilia Vitiello, and Mei-Hui Wang. Evaluating cardiac health through semantic soft computing techniques. *Soft Computing*, volume 16, pages 1165–1181, 2012.

- 2011 Giovanni Acampora, Vincenzo Loia, and Autilia Vitiello. Distributing emotional services in ambient intelligence through cognitive agents. *Service Oriented Computing and Applications*, volume 5, pages 17–35, 2011.
- [In Conference Proceedings](#)
- 2023 Giovanni Acampora and Autilia Vitiello. An ieeecsd 1855 driver for synthesizing quantum fuzzy inference engines. 2023.
- 2023 Giovanni Acampora and Autilia Vitiello. A competent memetic algorithm for error mitigation in quantum measurement. 2023.
- 2023 Giovanni Acampora, Alfredo Massa, Roberto Schiattarella, and Autilia Vitiello. Distributing fuzzy inference engines on quantum computers. 2023.
- 2023 Giovanni Acampora, Angela Chiatto, and Autilia Vitiello. Fuzzy clustering for qaoa complexity reduction. 2023.
- 2023 Giovanni Acampora, Angela Chiatto, and Autilia Vitiello. A comparison of evolutionary algorithms for training variational quantum classifiers. 2023.
- 2023 Giovanni Acampora, Angela Chiatto, Stefano De Luca, Roberta Di Pace, Alfredo Massa, Roberto Schiattarella, and Autilia Vitiello. Application of quantum genetic algorithms to network signal setting design. 2023.
- 2023 Giovanni Acampora, Angela Chiatto, Luigi Coraggio, Giovanni De Gregorio, Roberto Schiattarella, and Autilia Vitiello. Genetic algorithms for constructing effective nuclear shell-model hamiltonians. 2023.
- 2022 Giovanni Acampora, Roberto Schiattarella, and Autilia Vitiello. Quantum mating operator: A new approach to evolve chromosomes in genetic algorithms. 2022.
- 2022 Giovanni Acampora, Ferdinando Di Martino, Gennaro Alessio Robertazzi, and Autilia Vitiello. A web application for running quantum-enhanced support vector machine. volume 2022-July, 2022.
- 2022 Giovanni Acampora, Angela Chiatto, and Autilia Vitiello. Training variational quantum circuits through genetic algorithms. 2022.
- 2021 Acampora Giovanni, Roberto Schiattarella, and Autilia Vitiello. Quantum genetic selection. In *GECCO '21: Genetic and Evolutionary Computation Conference, Lille, France, July 10-14, 2021*. ACM, 2021.
- 2021 Giovanni Acampora and Autilia Vitiello. Error mitigation in quantum measurement through fuzzy c-means clustering. In *30th IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2021, Luxembourg, July 11-14, 2021*, pages 1–6. IEEE, 2021.
- 2021 Giovanni Acampora, Ferdinando Di Martino, Roberto Schiattarella, and Autilia Vitiello. Measuring distance between quantum states by fuzzy similarity operators. In *30th IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2021, Luxembourg, July 11-14, 2021*, pages 1–6. IEEE, 2021.
- 2021 Giovanni Acampora, Michele Grossi, and Autilia Vitiello. Genetic algorithms for error mitigation in quantum measurement. In *IEEE Congress on Evolutionary Computation, CEC 2021, Krakow, Poland, June 28- July 1, 2021*, pages 1–7. IEEE, 2021.
- 2021 Giovanni Acampora, Michele Grossi, and Autilia Vitiello. Genetic algorithms for error mitigation in quantum measurement. page 1826 – 1832, 2021.
- 2021 Giovanni Acampora, Michele Grossi, and Autilia Vitiello. Genetic algorithms based on bhattacharyya distance for quantum measurement error mitigation. In *2021 IEEE International Conference on Systems, Man, and Cybernetics (SMC)*, pages 3448–3453. IEEE, 2021.
- 2021 Giovanni Acampora, Ciro Di Nunzio, Luciano Garofano, Maurizio Saliva, and Autilia Vitiello. Applying density-based clustering for bloodstain pattern analysis. In *2021 IEEE International Conference on Systems, Man, and Cybernetics (SMC)*, pages 28–33. IEEE, 2021.

- 2020 Giovanni Acampora, Autilia Vitiello, and Roberta Siciliano. MIDA: a web tool for missing data imputation based on a boosted and incremental learning algorithm. In *29th IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2020, Glasgow, UK, July 19-24, 2020*, pages 1–6. IEEE, 2020.
- 2020 Giovanni Acampora and Autilia Vitiello. Tssweb: a web tool for training set selection. In *29th IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2020, Glasgow, UK, July 19-24, 2020*, pages 1–7. IEEE, 2020.
- 2020 Giovanni Acampora, Pasquale Trinchese, and Autilia Vitiello. Classifying EEG signals in single-channel ssvep-based bcis through support vector machine. In *2020 IEEE International Conference on Systems, Man, and Cybernetics, SMC 2020, Toronto, ON, Canada, October 11-14, 2020*, pages 2305–2310. IEEE, 2020.
- 2019 Giovanni Acampora, Pasquale Trinchese, and Autilia Vitiello. Applying logistic regression for classification in single-channel ssvep-based bcis. In *2019 IEEE International Conference on Systems, Man and Cybernetics, SMC 2019, Bari, Italy, October 6-9, 2019*, pages 33–38. IEEE, 2019.
- 2019 Giovanni Acampora, Jesús Alcalá-Fdez, Roberta Siciliano, José M. Soto-Hidalgo, and Autilia Vitiello. Visualjfm1: A visual environment for designing fuzzy systems according to IEEE std 1855-2016. In *2019 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2019, New Orleans, LA, USA, June 23-26, 2019*, pages 1–6. IEEE, 2019.
- 2018 Francisco Jesus Arcos, José Manuel Soto-Hidalgo, Autilia Vitiello, Giovanni Acampora, and Jesús Alcalá-Fdez. Interoperability for embedded systems in JFML software: An arduino-based implementation. In *2018 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2018, Rio de Janeiro, Brazil, July 8-13, 2018*, pages 1–8. IEEE, 2018.
- 2018 Francisco Jesús Arcos, José Manuel Soto Hidalgo, Autilia Vitiello, Giovanni Acampora, and Jesús Alcalá Fernández. Nuevo módulo de conexión inalámbrico vía bluetooth con arduino en la librería jfm1. In *XVIII Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA 2018) 23-26 de octubre de 2018 Granada, España*, pages 233–238. Asociación Española para la Inteligencia Artificial (AEPIA), 2018.
- 2018 Giovanni Acampora, Federico Luongo, and Autilia Vitiello. Quantum implementation of fuzzy systems through grover’s algorithm. In *2018 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2018, Rio de Janeiro, Brazil, July 8-13, 2018*, pages 1–8. IEEE, 2018.
- 2018 Giovanni Acampora, Pasquale D’Alterio, and Autilia Vitiello. Learning type-2 fuzzy rule-based systems through memetic algorithms. In *2018 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2018, Rio de Janeiro, Brazil, July 8-13, 2018*, pages 1–7. IEEE, 2018.
- 2018 Giovanni Acampora, Mario Luca Bernardi, Marta Cimitile, Genoveffa Tortora, and Autilia Vitiello. A fuzzy clustering-based approach to study malware phylogeny. In *2018 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2018, Rio de Janeiro, Brazil, July 8-13, 2018*, pages 1–8. IEEE, 2018.
- 2017 Autilia Vitiello, Giovanni Acampora, Mariacarla Staffa, Bruno Siciliano, and Silvia Rossi. A neuro-fuzzy-bayesian approach for the adaptive control of robot proxemics behavior. In *2017 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2017, Naples, Italy, July 9-12, 2017*, pages 1–6. IEEE, 2017.
- 2017 Autilia Vitiello, Giovanni Acampora, Francesco Cutugno, Petra Wagner, and Antonio Origlia. An adaptive neuro-fuzzy inference system for the qualitative study of perceptual prominence in linguistics. In *2017 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2017, Naples, Italy, July 9-12, 2017*, pages 1–6. IEEE, 2017.
- 2017 Giovanni Acampora and Autilia Vitiello. Extending IEEE std 1855 for designing arduino™-based fuzzy systems. In *2017 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2017, Naples, Italy, July 9-12, 2017*, pages 1–6. IEEE, 2017.

- 2017 Giovanni Acampora, Genoveffa Tortora, and Autilia Vitiello. An intelligent framework for predicting state war engagement from territorial data. In Man Ho Allen Au, Arcangelo Castiglione, Kim-Kwang Raymond Choo, Francesco Palmieri, and Kuan-Ching Li, editors, *Green, Pervasive, and Cloud Computing - 12th International Conference, GPC 2017, Cetara, Italy, May 11-14, 2017, Proceedings*, volume 10232 of *Lecture Notes in Computer Science*, pages 712–721, 2017.
- 2017 Giovanni Acampora, Alessandro G. Di Nuovo, Bruno Siciliano, and Autilia Vitiello. A comparison of fuzzy approaches for training a humanoid robotic football player. In *2017 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2017, Naples, Italy, July 9-12, 2017*, pages 1–6. IEEE, 2017.
- 2017 Giovanni Acampora, Mario Luca Bernardi, Marta Cimitile, Genoveffa Tortora, and Autilia Vitiello. A fuzzy-based autoscaling approach for process centered cloud systems. In *2017 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2017, Naples, Italy, July 9-12, 2017*, pages 1–8. IEEE, 2017.
- 2016 Giovanni Acampora and Autilia Vitiello. jmeme: A java library for designing competent memetic algorithms. In *2016 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2016, Vancouver, BC, Canada, July 24-29, 2016*, pages 386–393. IEEE, 2016.
- 2016 Giovanni Acampora, Genoveffa Tortora, and Autilia Vitiello. Comparison of multi-objective evolutionary algorithms for prototype selection in nearest neighbor classification. In *2016 IEEE Symposium Series on Computational Intelligence, SSCI 2016, Athens, Greece, December 6-9, 2016*, pages 1–8. IEEE, 2016.
- 2016 Giovanni Acampora, Genoveffa Tortora, and Autilia Vitiello. Applying SPEA2 to prototype selection for nearest neighbor classification. In *2016 IEEE International Conference on Systems, Man, and Cybernetics, SMC 2016, Budapest, Hungary, October 9-12, 2016*, pages 3924–3929. IEEE, 2016.
- 2016 Giovanni Acampora, Davide Caruso, Alfredo Vaccaro, and Autilia Vitiello. A search group algorithm for optimal voltage regulation in power systems. In *IEEE Congress on Evolutionary Computation, CEC 2016, Vancouver, BC, Canada, July 24-29, 2016*, pages 3662–3669. IEEE, 2016.
- 2015 Giovanni Acampora, Autilia Vitiello, Ciro Di Nunzio, Maurizio Saliva, and Luciano Garofano. Towards automatic bloodstain pattern analysis through cognitive robots. In *2015 IEEE International Conference on Systems, Man, and Cybernetics, Kowloon Tong, Hong Kong, October 9-12, 2015*, pages 2447–2452. IEEE, 2015.
- 2015 Giovanni Acampora and Autilia Vitiello. A multiple statistical comparison of nature-inspired algorithms for learning fuzzy cognitive maps. In Adnan Yazici, Nikhil R. Pal, Uzay Kaymak, Trevor Martin, Hisao Ishibuchi, Chin-Teng Lin, João M. C. Sousa, and Bülent Tütmez, editors, *2015 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2015, Istanbul, Turkey, August 2-5, 2015*, pages 1–8. IEEE, 2015.
- 2015 Giovanni Acampora and Autilia Vitiello. Learning of fuzzy cognitive maps for modelling gene regulatory networks through big bang-big crunch algorithm. In Adnan Yazici, Nikhil R. Pal, Uzay Kaymak, Trevor Martin, Hisao Ishibuchi, Chin-Teng Lin, João M. C. Sousa, and Bülent Tütmez, editors, *2015 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2015, Istanbul, Turkey, August 2-5, 2015*, pages 1–6. IEEE, 2015.
- 2014 Giuseppe D'Aniello, Francesco Orciuoli, Mimmo Parente, and Autilia Vitiello. Enhancing an ami-based framework for u-commerce by applying memetic algorithms to plan shopping. In *2014 International Conference on Intelligent Networking and Collaborative Systems*, pages 169–175. IEEE, 2014.

- 2014 Giovanni Acampora, Autilia Vitiello, Ciro Di Nunzio, Maurizio Saliva, and Luciano Garofano. Bloodstain pattern analysis - A new challenge for computational intelligence community. In António Dourado, José Manuel Cadenas, and Joaquim Filipe, editors, *FCTA 2014 - Proceedings of the International Conference on Fuzzy Computation Theory and Applications, part of IJCCI 2014, Rome, Italy, 22 - 24 October, 2014*, pages 211–216. SciTePress, 2014.
- 2014 Giovanni Acampora, Marek Reformat, and Autilia Vitiello. Extending FML with evolving capabilities through a scripting language approach. In *IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2014, Beijing, China, July 6-11, 2014*, pages 857–864. IEEE, 2014.
- 2014 Giovanni Acampora, Hisao Ishibuchi, and Autilia Vitiello. A comparison of multi-objective evolutionary algorithms for the ontology meta-matching problem. In *Proceedings of the IEEE Congress on Evolutionary Computation, CEC 2014, Beijing, China, July 6-11, 2014*, pages 413–420. IEEE, 2014.
- 2014 Giovanni Acampora, Arcangelo Castiglione, and Autilia Vitiello. A fuzzy logic based reputation system for e-markets. In *IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2014, Beijing, China, July 6-11, 2014*, pages 865–872. IEEE, 2014.
- 2014 Giovanni Acampora, Kofi Appiah, Andrew Hunter, and Autilia Vitiello. Interoperable services based on activity monitoring in ambient assisted living environments. In *2014 IEEE Symposium on Intelligent Agents, IA 2014, Orlando, FL, USA, December 9-12, 2014*, pages 81–88. IEEE, 2014.
- 2013 Giovanni Acampora and Autilia Vitiello. Collaborative memetic agents for enabling semantic interoperability. In *2013 IEEE Symposium on Intelligent Agents, IA 2013, Singapore, April 16-19, 2013*, pages 21–27. IEEE, 2013.
- 2013 Giovanni Acampora, Uzay Kaymak, Vincenzo Loia, and Autilia Vitiello. A fml-based fuzzy tuning for a memetic ontology alignment system. In *FUZZ-IEEE 2013, IEEE International Conference on Fuzzy Systems, Hyderabad, India, 7-10 July, 2013, Proceedings*, pages 1–8. IEEE, 2013.
- 2013 Giovanni Acampora, Uzay Kaymak, Vincenzo Loia, and Autilia Vitiello. Applying NSGA-II for solving the ontology alignment problem. In *IEEE International Conference on Systems, Man, and Cybernetics, Manchester, SMC 2013, United Kingdom, October 13-16, 2013*, pages 1098–1103. IEEE, 2013.
- 2012 Giovanni Acampora and Autilia Vitiello. Improving agent interoperability through a memetic ontology alignment: A comparative study. In *FUZZ-IEEE 2012, IEEE International Conference on Fuzzy Systems, Brisbane, Australia, June 10-15, 2012, Proceedings*, pages 1–8. IEEE, 2012.
- 2012 Giovanni Acampora, Vincenzo Loia, and Autilia Vitiello. Using ANFIS and FML for deploying transparent services in smart environments. In IIsun You, Leonard Barolli, Antonio Gentile, Hae-Duck Joshua Jeong, Marek R. Ogiela, and Fatos Xhafa, editors, *Sixth International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing, IMIS 2012, Palermo, Italy, July 4-6, 2012*, pages 628–633. IEEE Computer Society, 2012.
- 2012 Giovanni Acampora, Vincenzo Loia, and Autilia Vitiello. Managing urban waste collection through timed automata based fuzzy cognitive maps. In Gerald Quirchmayr, Josef Basl, IIsun You, Lida Xu, and Edgar R. Weippl, editors, *Multidisciplinary Research and Practice for Information Systems - IFIP WG 8.4, 8.9/TC 5 International Cross-Domain Conference and Workshop on Availability, Reliability, and Security, CD-ARES 2012, Prague, Czech Republic, August 20-24, 2012. Proceedings*, volume 7465 of *Lecture Notes in Computer Science*, pages 501–515. Springer, 2012.
- 2012 Giovanni Acampora, Uzay Kaymak, Vincenzo Loia, and Autilia Vitiello. Hybridizing genetic algorithms and hill climbing for similarity aggregation in ontology matching. In *12th UK Workshop on Computational Intelligence, UKCI 2012, Edinburgh, United Kingdom, September 5-7, 2012*, pages 1–6. IEEE, 2012.

- 2011 Giovanni Acampora, Vincenzo Loia, and Autilia Vitiello. Exploiting timed automata based fuzzy controllers for voltage regulation in smart grids. In *FUZZ-IEEE 2011, IEEE International Conference on Fuzzy Systems, Taipei, Taiwan, 27-30 June, 2011, Proceedings*, pages 223–230. IEEE, 2011.
- 2011 Giovanni Acampora, Vincenzo Loia, and Autilia Vitiello. A cognitive multi-agent system for emotion-aware ambient intelligence. In *2011 IEEE Symposium on Intelligent Agent, IA 2011, Paris, France, April 14-15, 2011*, pages 85–92. IEEE, 2011.
- 2011 Giovanni Acampora, Tatiana Kiseliova, Karaman Pagava, and Autilia Vitiello. Towards application of FML in suspicion of non-common diseases. In *FUZZ-IEEE 2011, IEEE International Conference on Fuzzy Systems, Taipei, Taiwan, 27-30 June, 2011, Proceedings*, pages 2073–2079. IEEE, 2011.
- 2011 Giovanni Acampora, Matteo Gaeta, Enrique Muñoz Ballester, and Autilia Vitiello. An adaptive multi-agent memetic system for personalizing e-learning experiences. In *FUZZ-IEEE 2011, IEEE International Conference on Fuzzy Systems, Taipei, Taiwan, 27-30 June, 2011, Proceedings*, pages 123–130. IEEE, 2011.
- 2011 Giovanni Acampora, Pasquale Avella, Vincenzo Loia, Saverio Salerno, and Autilia Vitiello. Improving ontology alignment through memetic algorithms. In *FUZZ-IEEE 2011, IEEE International Conference on Fuzzy Systems, Taipei, Taiwan, 27-30 June, 2011, Proceedings*, pages 1783–1790. IEEE, 2011.
- 2010 Giovanni Acampora, Vincenzo Loia, and Autilia Vitiello. Hybridizing fuzzy control and timed automata for modeling variable structure fuzzy systems. In *FUZZ-IEEE 2010, IEEE International Conference on Fuzzy Systems, Barcelona, Spain, 18-23 July, 2010, Proceedings*, pages 1–8. IEEE, 2010.
- 2010 Giovanni Acampora, Vincenzo Loia, and Autilia Vitiello. Enhancing transparent fuzzy controllers through temporal concepts: an application to computer games. In *2010 International Conference on Technologies and Applications of Artificial Intelligence*, pages 405–412. IEEE, 2010.
- 2010 Giovanni Acampora, Matteo Gaeta, Vincenzo Loia, and Autilia Vitiello. Multi-agent memetic computing for adaptive learning experiences. In *FUZZ-IEEE 2010, IEEE International Conference on Fuzzy Systems, Barcelona, Spain, 18-23 July, 2010, Proceedings*, pages 1–8. IEEE, 2010.

Book Chapters

- 2021 Giovanni Acampora, Carmela Iorio, Giuseppe Pandolfo, Roberta Siciliano, and Autilia Vitiello. A memetic algorithm for solving the rank aggregation problem. In *Algorithms as a Basis of Modern Applied Mathematics*, pages 447–460. Springer, 2021.
- 2020 Giovanni Acampora and Autilia Vitiello. A study on local search meta-heuristics for ontology alignment. In *Computational Intelligence for Semantic Knowledge Management: New Perspectives for Designing and Organizing Information Systems*, pages 53–70. Springer, 2020.
- 2020 Giovanni Acampora, Witold Pedrycz, Athanasios V Vasilakos, and Autilia Vitiello. Preface. In *Computational Intelligence for Semantic Knowledge Management: New Perspectives for Designing and Organizing Information Systems*. Springer, 2020.
- 2016 Giovanni Acampora, Davide Caruso, Alfredo Vaccaro, Autilia Vitiello, and Ahmed F Zobaa. The role of nature-inspired metaheuristic algorithms for optimal voltage regulation in urban smart grids. *From Smart Grids to Smart Cities: New Challenges in Optimizing Energy Grids*, pages 89–128. Wiley Online Library, 2016.
- 2014 Giovanni Acampora and Autilia Vitiello. Improving voltage regulation in smart grids through adaptive fuzzy agents. *Computational Intelligence Applications In Smart Grids: Enabling Methodologies For Proactive And Self-organizing Power Systems*, page 165. World Scientific, 2014.

- 2013 Giovanni Acampora, Vincenzo Loia, and Autilia Vitiello. An enhanced visual environment for designing, testing and developing fml-based fuzzy systems. In *On the Power of Fuzzy Markup Language*, pages 51–70. Springer, 2013.
- 2013 Giovanni Acampora, Vincenzo Loia, and Autilia Vitiello. Distributing fuzzy reasoning through fuzzy markup language: An application to ambient intelligence. In *On the Power of Fuzzy Markup Language*, pages 33–50. Springer, 2013.