

Curriculum



Nome Name:	Giovanna
Cognome Surname:	BIMONTE

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Sito WEB WEB site:	https://docenti.unisa.it/021834/home

POSIZIONE PROFESSIONALE ATTUALE / CURRENT PROFESSIONAL POSITION:

Posizione attuale Current position:	In servizio
Qualifica Qualification:	Ricercatore confermato
Ateneo/Ente/Azienda University/Institution/Company:	Università degli Studi di SALERNO
Nazione Ateneo/Ente/Azienda University/Institution/Company Country:	ITA
Anno inizio Start Year:	2009
Anno fine End Year:	n.d.

PRECEDENTI ESPERIENZE LAVORATIVE (ULTIMI 10 ANNI) / PREVIOUS WORK EXPERIENCE (LAST 10 YEARS):

LINGUE / LANGUAGES:

Lingua Language:	Inglese
Scrittura Writing:	C1
Comunicazione Communication:	C1

Lingua Language:	Francese
Scrittura Writing:	A1
Comunicazione Communication:	A1

AREA/SETTORE SCIENTIFICO-DISCIPLINARE / AREA/SECTOR SCIENTIFIC-DISCIPLINARY

Area scientifico-disciplinare Area scientific-disciplinary:	Scienze economiche e statistiche
Area scientifico-disciplinare codice Area scientific-disciplinary code:	13
Settore scientifico-disciplinare codice Sector scientific-disciplinary code:	-Metodi matematici dell'economia e delle scienze attuariali e finanziarie
Settore scientifico-disciplinare codice Sector scientific-disciplinary code:	-STAT-04/A

DESCRIZIONE DEI PRINCIPALI RISULTATI SCIENTIFICI CONSEGUITI NEGLI ULTIMI 10 ANNI (CON ANNESSO ELENCO DI MASSIMO 10 PUBBLICAZIONI) / DESCRIPTION OF THE MAIN SCIENTIFIC RESULTS ACHIEVED IN THE LAST 10 YEARS (WITH ATTACHED LIST OF MAXIMUM 10 PUBLICATIONS):

Descrizione Description:	<i>My research activity has primarily focused on the analysis and development of cooperative models. A central strand of my work concerns the theoretical advancement of NTU games in Partition Function Form, a framework particularly suited to modeling environments where externalities among coalitions are present. In this context, I have contributed to the characterization of core stability and efficiency, as well as to the analysis of convexity properties under varying schemes of externalities. By extending classical solution concepts to the PFF setting, my work provides a refined understanding of coalition formation in complex environments—such as those involving public goods, environmental negotiations, or shared resource management—where each coalition's payoff crucially depends on the overall partition of agents. I have also investigated the conditions under which convexity can be preserved or generalized in these games,</i>
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	<p><i>proposing new theoretical tools that account for combinatorial structures and interdependencies among coalitions. These contributions aim to bridge abstract mathematical modeling with real-world applications in policy design, resource allocation, and institutional governance. Within this framework, I investigated the cooperative dimension of international environmental agreements and sustainable resource management, proposing game-theoretic mechanisms to support joint action and policy coordination in the presence of global public goods and externalities. One notable contribution is the development of a new index capturing the interplay between cooperation, technology diffusion, and environmental protection, which applies cooperative game theory to assess policy effectiveness in achieving environmental goals through innovation. Another relevant line of research explores the integration of cooperative game theory with data-driven methods. In particular, I have applied the Shapley value as a feature attribution and weighting tool in forecasting models, with a focus on mortality prediction and ensemble learning. This approach enhances the interpretability and performance of predictive models by assigning weights to individual predictors based on their marginal contribution to forecast accuracy. The resulting ensemble methods demonstrate superior robustness across different forecast horizons and demographic subgroups, offering both theoretical and empirical contributions to the field of interpretable forecasting. A further line of research focuses on experimental economics and strategic learning. I designed classroom experiments to explore decision-making and the emergence of cooperation, especially in interdisciplinary settings. These studies reveal behavioral stability in repeated games and support the educational value of game theory.</i></p>
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PUBBLICAZIONI / PUBLICATIONS:

Anno della pubblicazione Year of publication:	2024
Citazione Citation:	Bimonte, Giovanna, Senatore, Luigi, Tramontano, Salvatore (2024). Efficiency and the core in NTU games in partition function form. ANNALS OF OPERATIONS RESEARCH, p. 1-12, ISSN: 0254-5330, doi: 10.1007/s10479-024-06192-1
Anno della pubblicazione Year of publication:	2019
Citazione Citation:	Barra Cristian, Giovanna Bimonte, Luigi Senatore (2019). Cooperation, diffusion of technology and environmental protection: a new index. QUALITY AND QUANTITY, vol. 53(4), p. 1913-1940, ISSN: 1573-7845, doi: 10.1007/s11135-019-00848-y

Anno della pubblicazione Year of publication:	2015
Citazione Citation:	BIMONTE, GIOVANNA, BARRA, CRISTIAN, SPENNATI, PIETRO (2015). Did fiscal institutions affect Wagner's law in Italy during 1951-2009 period? An empirical analysis. APPLIED ECONOMICS, vol. 47, p. 6409-6424, ISSN: 0003-6846, doi: 10.1080/00036846.2015.1071475

Anno della pubblicazione Year of publication:	2022
Citazione Citation:	Bimonte, G, Ioppolo, G, Senatore, L, Trincone, B (2022). Government eco-innovation incentives in a recycling system: A Stackelberg-type model. BUSINESS STRATEGY AND THE ENVIRONMENT, p. 1-9, ISSN: 0964-4733, doi: 10.1002/bse.3337

Anno della pubblicazione Year of publication:	2025
Citazione Citation:	Luigi Senatore, Giovanna Bimonte, Andrea Gatto (2025). Sustainable and resilient governance of common-pool resources: A critical analysis of non-cooperative and cooperative game theory applications. JOURNAL OF ECONOMIC SURVEYS, p. 1-31, ISSN: 1467-6419, doi: 10.1111/joes.12690

Anno della pubblicazione Year of publication:	2024
Citazione Citation:	Giovanna Bimonte, Maria Russolillo, Hanlin Shang, Yang Yang (2024). Mortality Models Ensemble via Shapley Value. DECISIONS IN ECONOMICS AND FINANCE, p. 1-30, ISSN: 1129-6569, doi: 10.1007/s10203-024-00455-z

Anno della pubblicazione Year of publication:	2021
Citazione Citation:	Bimonte Giovanna, Romano Maria Grazia, Russolillo Maria (2021). Green Innovation and Competition: R&D Incentives in a Circular Economy. GAMES, vol. 12, p. 1-13, ISSN: 2073-4336, doi: 10.3390/g12030068

Anno della pubblicazione Year of publication:	2023
Citazione Citation:	Giovanna Bimonte, Francesco Saverio Tortoriello, Ilaria Veronesi (2023). An interdisciplinary educational path to understand the economic phenomena of a fluid and complex world with mathematics. SOFT COMPUTING, p. 1-13, ISSN: 1432-7643, doi: 10.1007/s00500-023-08377-5

Anno della pubblicazione Year of publication:	2022
Citazione Citation:	Bimonte G., Tortoriello F. S., Veronesi I. (2022). Chapter 11 "Game Theory Lab": A Gamification Laboratory for High School Students. In: IGI

	Global Reference Books. (a cura di): IGI Global Reference Books, Handbook of Research on International Approaches and Practices for Gamifying Mathematics. p. 216-235, doi: 10.4018/978-1-7998-9660-9.ch011
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Anno della pubblicazione Year of publication:	2016
Citazione Citation:	BARRA, CRISTIAN, BIMONTE, GIOVANNA, ZOTTI, Roberto (2016). On the relationship among efficiency, capitalization and risk: does management matter in local banking market?. APPLIED ECONOMICS, vol. 48(41), p. 3912-3934, ISSN: 0003-6846, doi: 10.1080/00036846.2016.1148257

DESCRIZIONE DEI PRINCIPALI PROGETTI DI RICERCA E PREMI CONSEGUITI NEGLI ULTIMI 10 ANNI (CON ANNESSO ELENCO DI MASSIMO 10 RISULTATI, INCLUDENDO, A TITOLO DI ESEMPIO, PRINCIPAL INVESTIGATOR O COORDINATORE LOCALE DI PROGETTI DI RICERCA COMPETITIVI NAZIONALI O INTERNAZIONALI, SIGNIFICATIVI PREMI CONSEGUITI PER LA PROPRIA ATTIVITÀ DI RICERCA)/ DESCRIPTION OF THE MAIN RESEARCH PROJECTS AND AWARDS AWARDED IN THE LAST 10 YEARS (WITH ATTACHED LIST OF MAXIMUM 10 ACHIEVEMENTS, INCLUDING, FOR EXAMPLE, PRINCIPAL INVESTIGATOR OR LOCAL COORDINATOR OF NATIONAL OR INTERNATIONAL COMPETITIVE RESEARCH PROJECTS, SIGNIFICANT AWARDS AWARDED FOR YOUR RESEARCH ACTIVITY):

Descrizione Description:	<i>DySES award Best paper Best paper presentato alla DySES (Dynamics of Socio Economic Systems) 2022 conference su Complex problems. Optimal localization using different weighted Voronoi diagrams (joint with L. Senatore)</i>
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DESCRIZIONE DEI PRINCIPALI RISULTATI CONSEGUITI NEGLI ULTIMI 10 ANNI IN TERMINI DI SVILUPPO DI RETI E RELAZIONI SCIENTIFICHE NAZIONALI E INTERNAZIONALI (CON ANNESSO ELENCO DI MASSIMO 5 RISULTATI, INCLUDENDO, A TITOLO DI ESEMPIO, PARTECIPAZIONE O ORGANIZZAZIONE DI CONVEGNI NAZIONALI E INTERNAZIONALI; CONTRIBUTI A CONSORZI DI RICERCA) / DESCRIPTION OF THE MAIN RESULTS ACHIEVED IN THE LAST 10 YEARS IN TERMS OF DEVELOPMENT OF NATIONAL AND INTERNATIONAL SCIENTIFIC NETWORKS AND RELATIONS (WITH ATTACHED LIST OF MAXIMUM 5 RESULTS, INCLUDING, FOR EXAMPLE, PARTICIPATION OR ORGANIZATION OF

**NATIONAL AND INTERNATIONAL CONFERENCES;
CONTRIBUTIONS TO RESEARCH CONSORTIA):**

Descrizione Description:	
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DESCRIZIONE DEI PRINCIPALI RISULTATI CONSEGUITI NEGLI ULTIMI 10 ANNI IN TERMINI DI SUPPORTO ALLA COMUNITÀ SCIENTIFICA (CON ANNESSO ELENCO DI MASSIMO 5 RISULTATI, INCLUDENDO, A TITOLO DI ESEMPIO, RESPONSABILITÀ DI DIREZIONE DI COMITATI EDITORIALI; INCARICHI DI VALUTAZIONE DELLA RICERCA PRESSO ISTITUZIONI NAZIONALI O INTERNAZIONALI; RESPONSABILITÀ ISTITUZIONALI ALL'INTERNO DELL'ISTITUZIONE DI APPARTENENZA O DI ALTRE ISTITUZIONI) / DESCRIPTION OF THE MAIN RESULTS ACHIEVED IN THE LAST 10 YEARS IN TERMS OF SUPPORT TO THE SCIENTIFIC COMMUNITY (WITH ATTACHED LIST OF MAXIMUM 5 RESULTS, INCLUDING, FOR EXAMPLE, MANAGEMENT RESPONSIBILITIES OF EDITORIAL COMMITTEES; RESEARCH EVALUATION ROLES AT NATIONAL OR INTERNATIONAL INSTITUTIONS; INSTITUTIONAL RESPONSIBILITIES WITHIN THE INSTITUTION OF AFFILIATION OR OTHER INSTITUTIONS):

Descrizione Description:	
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DESCRIZIONE DEI PRINCIPALI RISULTATI CONSEGUITI NEGLI ULTIMI 10 ANNI IN TERMINI VALORIZZAZIONE DELLE CONOSCENZE (CON ANNESSO ELENCO DI MASSIMO 3 RISULTATI, RELATIVI ALLA PARTECIPAZIONE DEL CANDIDATO ALLE ATTIVITÀ DI VALORIZZAZIONE DELLE CONOSCENZE) / DESCRIPTION OF THE MAIN RESULTS ACHIEVED IN THE LAST 10 YEARS IN TERMS OF KNOWLEDGE VALORIZATION (WITH ATTACHED LIST OF MAXIMUM 3 RESULTS, RELATING TO THE CANDIDATE'S PARTICIPATION IN KNOWLEDGE VALORIZATION ACTIVITIES):

Descrizione Description:	
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Giovanna BIMONTE

Il presente curriculum costituisce allegato e parte integrante dell'incarico sottoscritto