

CURRICULUM VITAE



PERSONAL INFORMATION

Name	SCRIMALI LAURA ROSA MARIA
Address	Dipartimento di Matematica e Informatica, Viale A. Doria, 6 – 95125 Catania, Italy
Telephone	+39 095 7383059
Fax	+39 095 330095
E-mail	laura.scrimali@unict.it
Nationality	Italian

WORK EXPERIENCE

Dates	December 2014 - present
Position held	Associate Professor – Operations Research
Dates	November 2007- November 2014
Position held	Assistant Professor – Operations Research
Name and address of employer	Università degli Studi di Catania – Piazza Università 2, 95124 Catania, Italy
Type of business or sector	University
Main activities and responsibilities	Teaching, research activity

EDUCATION AND QUALIFICATIONS

- Dates August 2019 -August 2028
- Name and type of organisation providing education and training Italian Ministry of Education, Universities and Research
- Title of qualification awarded Italian professorship qualifications for full professor in the field of Operations Research.
- Dates December 2006 - October 2007
- Name and type of organisation providing education and training University of Catania
- Principal subjects/occupational skills covered Research activity of duality, variational inequalities and equilibrium problems
- Title of qualification awarded Research fellow
- Dates September 2005 - August 2006
- Name and type of organisation providing education and training “Center for Operations Research and Econometrics” (CORE) - Université catholique de Louvain (Belgium)
- Principal subjects/occupational skills covered Research activity on numerical methods for variational inequalities and optimization problems
- Title of qualification awarded Post doctoral-fellow
- Dates March 2001 - January 2005
- Name and type of organisation providing education and training University of Naples “Federico II”
- Principal subjects/occupational skills covered Research activity on variational inequalities and traffic network problems

- skills covered
- Title of qualification awarded Ph.D. in Applied Mathematics and Computer Science
- Dates December 2000
- Name and type of organisation providing education and training University of Catania
- Title of qualification awarded Master degree in Mathematics
- Level in national classification 110/110 with merit

RESEARCH AND ACADEMIC EXPERIENCES

RESEARCH INTERESTS Convex optimization, variational inequality theory, bilevel problems, equilibrium problems in internet services, transportation, economic and finance, game theory, disaster relief, numerical methods.

RECENT PUBLICATIONS

Daniele P., Naselli O., Scrimali L. "An Optimization Model for Supply Chain Networks with co-creation", submitted.

Fargetta G., Scrimali, L. (2023) A Sustainable Dynamic Closed-Loop Supply Chain Network Equilibrium for Collectibles Markets, *Computational Management Science*, 20 (1) Article 19.

Fargetta, G., Scrimali, L. (2023). Time-Dependent Generalized Nash Equilibria in Social Media Platforms, In: Cappanera, P., Lapucci, M., Schoen, F., Sciandrone, M., Tardella, F., Visintin, F. (eds) *Optimization and Decision Science: Operations Research, Inclusion and Equity*. AIRO Springer Series, Vol. 9, pages 3-14, Springer, Cham.

Cappello G.M., Colajanni G., Daniele P., Galluccio L., Grasso C., Schembra G., Scrimali L. (2022) Optimizing FANET Lifetime for 5G Network Slice Provisioning, *IEEE Transactions on Network and Service Management* 19 (4), 4629-4649.

Cappello G.M., Colajanni G., Daniele P., Galluccio L., Grasso C., Schembra G., Scrimali L. (2022) A Multi-UAV's Provider Model for the Provision of 5G Service Chains: A Game Theoretic Approach, *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 2022, 13621 LNCS, pp. 445-459.

Fargetta G., Maugeri A., Scrimali L. (2022) A Stochastic Nash equilibrium problem for medical supply competition *J Optim Theory Appl.* 193 (1-3), 354-380 (2022). <https://doi.org/10.1007/s10957-022-02025-y>

Scrimali L. (2022) On the stability of coalitions in supply chain networks via generalized complementarity conditions. *Networks and Spatial Economics*, 22(2), 379-394 doi: <https://doi.org/10.1007/s1106-7-019-09461-w>

Fargetta G., Scrimali L. (2022) A multi-stage integer linear programming problem for personnel and patient scheduling for a therapy centre, in *Proceedings of the 11th International Conference on Operations Research and Enterprise Systems - ICORES*, pages 354-361. DOI: 10.5220/0010902500003117

Fargetta, G., Scrimali, L. (2022). Closed-Loop Supply Chain Network Equilibrium with Online Second-Hand Trading. In: Amorosi, L., Dell'Olmo, P., Lari, I. (eds) *Optimization in Artificial Intelligence and Data Sciences*. AIRO Springer Series, Vol. 8, 117-127, Springer, Cham. https://doi.org/10.1007/978-3-030-95380-5_11

Fargetta G., Scrimali L. (2021) A two-stage variational inequality for medical supply in emergency management. In: Cerulli R., Dell'Amico M., Guerriero F., Pacciarelli D., Sforza A. (eds.), *Optimization and Decision Science* AIRO Springer Series, Vol. 7, 91-102, Springer, Cham.

Daniele P., Naselli O., Scrimali L. (2021), An optimization model for the evacuation time in the presence of delay. In: Cerulli R., Dell'Amico M., Guerriero F., Pacciarelli D., Sforza A. (eds.),

Optimization and Decision Science, AIRO Springer Series, Vol. 7, 191-202, Springer, Cham.

Fargetta G., Scrimali L. (2021) Optimal emergency evacuation with uncertainty. In: Parasidis I.N., Providas E., Rassias Th.M. (eds.) *Mathematical Analysis in Interdisciplinary Research*, Springer Optimization and Its Applications, 179, 261–279, Springer.

Fargetta G., Scrimali L. (2021) Generalized Nash equilibrium and dynamics of popularity of online contents, *Optimization Letters*, 15(5), 1691-1709

RECENT TEACHING ACTIVITY

2023-2024 Game Theory (undergraduate course in Mathematics); Optimization (graduate course in Computer Science); Mathematical Methods applied to Optimization (graduate course in Mathematics), University of Catania

2022-2023 Game Theory (undergraduate course in Mathematics); Optimization (graduate course in Computer Science); Mathematical Methods applied to Optimization (graduate course in Mathematics), University of Catania; Optimization methods (Doctoral School, University of Messina)

2021-2022 Game Theory (undergraduate course in Mathematics); Optimization (graduate course in Computer Science); Mathematical Methods applied to Optimization (graduate course in Mathematics), University of Catania

2020-2021 Game Theory (undergraduate course in Mathematics); Optimization (graduate course in Computer Science); Mathematical Methods applied to Optimization (graduate course in Mathematics), Operations Research (graduate course in Rehabilitation Sciences of Health Professions), University of Catania

2019-2020 Game Theory (undergraduate course in Mathematics); Optimization (graduate course in Computer Science); Mathematical Methods applied to Optimization (graduate course in Mathematics); Operations Research (graduate course in Rehabilitation Sciences of Health Professions), University of Catania

2018-2019 Game Theory (undergraduate course in Mathematics); Optimization (graduate course in Computer Science); Mathematical Methods applied to Optimization (graduate course in Mathematics), University of Catania

ADMINISTRATIVE AND RESEARCH EXPERIENCES

Member of the Italian Research Project PRIN 2022 PNRR: "ACHILLES (ecosustainable efficient tech-driven Last mile logistics)", from September 2023;

Member of the Italian Research Project PNRR 2022: HPC, Big Data e Quantum Computing, from October 2022;

Member of the Italian Research Project "Giustizia Smart: Strumenti e Modelli per Ottimizzare il Lavoro dei Giudici – JUSTSmart", 2022-2023 University of Catania ;

Member of the Italian Research Project OMNIA - Ottimizzazione di Modelli di Network Slice 5G con UAV, 2020-2022 University of Catania;

Principal Investigator of the project "Modelli Matematici nell'insegnamento/apprendimento della Matematica", funded by University of Catania for the years 2016-2018

Member of the program committee of International Conference on Operations Research and Enterprise Systems (ICORES, from 2017)

Chair of the organizing committee of ODS 2018 – XLVIII Annual Meeting of AIRO - Italian Operations Research Society (10-13 September 2018, Taormina, Italy);

Co-organizer of the workshop "Variational inequalities, Nash equilibrium problems and applications" (VINEPA 2014, 2015, 2016, and 2018)

Tutor of the project on "Modelli decisionali e di interazione strategica" (20 hours), February-April 2018 for students of the High School "Liceo G. Galilei" of Catania

Member of the joint commission for relationships between students and professors in the Department for the years 2016-2024

Member of the Register of Expert Peer Reviewers for Italian Scientific Evaluation

Member of the teaching staff of the doctorate school in Computational and Computer Sciences of University of Naples, from February 2015 to December 2016

Reviewer for several applied mathematics journals

PROFESSIONAL SOCIETIES

AIRO (Italian Society of Operations Research)
GNAMPA (Italian Society of Analysis, Calculus of Probabilities and Applications)
EURO (Association of European Operational Research Societies)
EWG EUROPT (The Continuous Optimization Working Group of EURO)

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE

Italian

OTHER LANGUAGES

English

- Reading skills Very good
- Writing skills Very good
- Verbal skills Very good

French

- *Reading skills* Good
- *Writing skills* Basic
- *Verbal skills* Basic

SOCIAL SKILL AND COMPETENCES

The participation and coordination of research project and the international collaborations made it possible to have excellent skills in team work and social relations in multicultural frameworks.

ORGANIZATIONAL SKILLS AND COMPETENCES

Excellent organizational skills due to coordination of research activity of Ph.D. students and master degree students, teaching experiences, organization of conferences, lectures and workshops.

Catania, January 19, 2024

