

Flora Amato

Flora Amato is a researcher in the field of Knowledge Management. Her research activities involve both theoretical and experimental researches, and mainly concern Games Theory, Semantic Processing in Information Retrieval and Extraction, information Integration, Formal Modeling and Verification Techniques, Knowledge Management.

She is Assistant Professor at the Department of Electrical Engineering and Information Technology of University of Napoli Federico II, Faculty of Engineering, where she carries out her research activity since 2006.

She graduated *summa cum laude* in Computer Science at the Faculty of Mathematics, Physics and Natural Sciences at the University Federico II of Naples in 2005. She received in 2009 the "Doctor of Philosophy" (PhD) degree in Computer and Control Engineering at the University of Naples "Federico II", dissertation thesis with title: "Methodologies and Techniques for Semantic Management of Documents in Dematerialization Processes".

During her Ph.D. (2006- 2009) she has defined and experimented an innovative architecture for semantic annotation and retrieval of multimedia data. As part of her postdoctoral research activities, she has extended semantic-based retrieval techniques to enact searches and analysis on social networks. She also worked on semantic-based definition of workflow languages, developing novel methodologies for composed processes definition and verification.

She is lecturer at the course of "Artificial Intelligence" for the Bachelor degree in Computer Science Engineering, at the University of Naples "Federico II". She was lecturer at the courses of "Foundations of Informatics", "Elements of Computer Science" and "Tools and Programming Techniques" at the same University.

In 2010, she won the national award "Working Capital" for best research projects, promoted by Telecom Italia S.p.A. obtaining research funds for designing a platform for semantic search. In 2009, she was awarded with the prize "Scrivi il Futuro" for the best research projects proposed by Ph.D. students from scientific faculties. In 2013, 2014 and 2015 she received an award for the significant scientific contribution in the 3PGCIC- 2013/2014/2015 conference (sponsored by IEEE). She is Program Committee Chair of the 11th International Conference on P2P, Parallel, Grid, Cloud and Internet Computing. She has also been general chair of several a workshop on Trusted Information in Big Data (TIBiDa) and Distributed System Applications (CADSA13, CADSA14, CADSA15). She was also member of numerous Program and Organization Committees of international conferences.

She is author of more of 70 research papers, published on IEEE Transaction, Elsevier Journal of Visual Languages & Computing, Elsevier Knowledge-Based Systems and Elsevier International Journal of Simulation Modelling Practice and Theory; Transactions on Data Privacy, Logic Journal of the IGPL of Oxford University Press and Inderscience International Journals.

She participated to several funded projects, both national and international. She cooperates with different Italian and International Academic Institutions and Research Institutes. In her Research activities, she collaborates with other academic institutions and research centers in public and private research projects.

The results of her research activities have been used in numerous collaborations with Italian and international companies (Telecom Italy spa, Engineering s.p.a., Ansaldo STS s.p.a.), public institutions (National Council of Notaries, Campania Local Government, Monaldi and Pascale Hospitals of Naples) and Regional Competence Centers on ICT and SCARL technologies.

List of Selected Publications

1. Francesco Moscato, Valeria Vittorini, Flora Amato, Antonino Mazzeo, Nicola Mazzocca. Solution Workflows for Model-Based Analysis of Complex Systems. IEEE Transaction on Automation Science and Engineering, Volume 9 Issue 1, pp.83-95, 2012. IEEE Robotics and Automation Society. ISSN: 1545-5955.

2. Francesco Colace, Massimo De Santo, Luca Greco, Flora Amato, Vincenzo Moscato, Antonio Picariello. Terminological Ontology Learning and Population using Latent Dirichlet Allocation. *Journal of Visual Languages & Computing*. Elsevier Publisher. Volume 25, Issue 6, December 2014, Pages 818–826. 2014
3. Flora Amato, Francesco Colace, Luca Greco, Vincenzo Moscato, Antonio Picariello. Semantic processing of multimedia data for e-government applications. *Journal of Visual Languages & Computing*. Elsevier Publisher. Volume 32, 35-41. 2016.
4. Flora Amato, Francesco Moscato. A model driven approach to data privacy verification in E-Health systems. *Transactions on Data Privacy*. Volume 8. Pages 273–296. 2015.
5. Flora Amato, Giuseppe De Pietro, Massimo Esposito, Nicola Mazzocca. An integrated framework for securing semi-structured health records. *Knowledge-Based Systems*, Volume 79, Pages 99-117. 2015
6. Flora Amato, Valentina Casola, Andrea Gaglione, Antonino Mazzeo. A semantic enriched data model for sensor network interoperability. *International Journal of Simulation Modelling Practice and Theory*, Volume 19, Issue 8, pp. 1745-1757, September 2011. Elsevier Publisher. ISSN: 1569-190X.
7. Flora Amato, Aniello De Santo, Vincenzo Moscato, Fabio Persia, Antonio Picariello. Detecting unexplained human behaviors in Social Networks. *IEEE International Conference on Semantic Computing (ICSC 2014)*, pp. 143-150. 2014.
8. Francesco Moscato, Flora Amato, Alba Amato, Rocco Aversa. Model-driven engineering of cloud components in MetaMORP(h)OSY. *Int. Journal of Grid and Utility Computing* Vol. 5 (2), pp. 107-122. 2014.
9. Flora Amato, Mario Barbareschi, Valentina Casola, Antonino Mazzeo. An FPGA-based smart classifier for decision support systems. In *Intelligent Distributed Computing VII*. pp. 289-299. Springer International Publishing. 2014
10. Flora Amato, Angelo Chianese, Antonino Mazzeo, Vincenzo Moscato, Antonio Picariello, Francesco Piccialli. The talking museum project. *Procedia Computer Science*, Elsevier Publisher. Vol 21, pp. 114-121. 2014.
11. Flora Amato, Vincenzo Moscato, Fabio Persia, Antonio Picariello, Francesco Gargiulo. An RDF-based framework for Semantic Indexing of web pages. *IEEE Seventh International Conference on Semantic Computing (ICSC 2013)*. pp. 395-396. 2013
12. Flora Amato, Valentina Casola, Nicola Mazzocca, Sara Romano. A semantic approach for fine-grain access control of e-health documents. *Logic Journal of the IGPL*. Oxford University Press. ISSN 1367-0751. 2012.
13. Flora Amato, Antonino Mazzeo, Vincenzo Moscato, Antonio Picariello, A Recommendation System for browsing of multimedia collections in the Internet of Things. Book Chapter of *Internet of Things and Inter-Cooperative Computational Technologies for Collective Intelligence*. Studies in Computational Intelligence Series. Vol. 460. 2012. Springer Berlin Heidelberg. ISBN: 978-3-642-34951-5.