SHORT CV OF PAOLINO DI FELICE

(July 2021)

Paolino Di Felice is Professor of Computer Science since 1999 at the Department of Industrial and Information Engineering & Economics of the University of L'Aquila (Italy). He has (co-)authored about 120 articles appeared in international journals, books, and conference proceedings. The main research topics investigated concerned Geographical Databases and Software Engineering.

A relevant research topic belonging to the first domain concerned the study of 2D *spatial relations* between spatial objects. Spatial relations constitute the kernel of spatial the SQL running on top of the today available DataBase Management Systems (e.g., Oracle, IBM-DB2, PostgreSQL/PostGIS). His research work has been included in the *Open Geospatial Consortium* standards for the definition of 2D *vector data types and topological operators*.

The research about the second domain is more recent. The focus is on Code generation of MVC Web applications using the Model Driven Architecture.

Di Felice has carried out a consistent activity of technological transfer in collaboration with several IT Italian firms. His research has been funded by national and international institutions and carried out in collaboration with researchers of several countries (Italy, Holland, Germany, Canada, and USA).

He has served regularly within national and international committees.

In 2021, he is a member of the Scientific Committee of the following International events:

https://iccsa.org/committees
https://saiconference.com/FTC2021/Committees
https://www.iaria.org/conferences2021/ComDATAANALYTICS21.html
http://www.dataconference.org/ProgramCommittee.aspx
https://www.mdpi.com/journal/applsci/special_issues/Application_Model_Driven_Engineering

RECENT PUBLICATIONS

Saeed, M.G., Paolone, G., and Di Felice, P. Hierarchical Evaluation of Software Projects: an Experiment. Proceedings of the Future Technologies Conference (FTC) 2021 (to appear).

Paolone, G., Marinelli, M., Paesani, R. and Di Felice, P. Experiments for Linking the Complexity of the Business UML Class Diagram to the Quality of the Associated Code? Computational Science and Its Applications. International Conference on Computational Science and its Applications – ICCSA 2021 (to appear).

Pilotti, F., Paolone, G., Di Valerio, D., Marinelli, M., Cocca, R. and Di Felice, P. An IT Infrastructure for Small- and Medium-sized Enterprises Willing to Compete in the Global Market. In Proceedings of the 23rd International Conference on Enterprise Information Systems - Volume 2: ICEIS 2021 ISBN 978-989-758-509-8 ISSN 2184-4992, pages 768-775. DOI: 10.5220/0010476907680775

Paolone, G. Paesani, R., Marinelli, M. and Di Felice, P. Empirical Assessment of the Quality of MVC Web Applications Returned by xGenerator. Computers 2021, 10(2), 20; https://doi.org/10.3390/computers10020020, 04 Feb 2021

Di Felice, P., Marinelli, M., Paolone, G., Pilotti, F. and Valenza, G. A NoSQL Database about Customer Reviews. International Journal of Computer Applications 174(14):42-46, January 2021 https://www.ijcaonline.org/archives/volume174/number14/31749-31749-2021 921044

Paolone, G., Marinelli, M., Paesani, R. and Di Felice, P. Automatic Code Generation of MVC Web Applications. Computers 2020, 9, 56; doi:10.3390/computers9030056

Paolino Di Felice. Ranking of Assets with Respect to Their Exposure to the Landslide Hazard: A GIS Proposal. ISPRS Int. J. Geo-Information 2020, 9(5), 326; doi:10.3390/ijgi9050326

Di Felice, P. Ranking of Illegal Buildings Close to Rivers: A Proposal, Its Implementation and Preliminary Validation. ISPRS Int. J. Geo-Information. 2019, 8(11), 510; https://doi.org/10.3390/ijgi8110510

Di Felice, P. and Iessi, M. A Citizen-Sensing-Based Digital Service for the Analysis of On-Site Post-Earthquake Messages. ISPRS Int. J. Geo-Information 2019, 8, 136; doi:10.3390/ijgi8030136

Di Felice, P. Metrics to Rank Illegal Buildings, Springer Nature Switzerland AG 2019. S. Misra et al. (Eds.): ICCSA 2019, LNCS 11620, pp. 34–43, 2019. https://doi.org/10.1007/978-3-030-24296-1_4

Di Felice, P., Pomante, L, and Di Felice, A.: Safety of Physical Assets: A Ranking Method and Its GIS Implementation. Computational Science and Its Applications. International Conference on Computational Science and its Applications – ICCSA 2018. Workshop on Geographical Analysis, Urban Modeling, Spatial Statistics. Springer International Publishing AG, part of Springer Nature 2018 O. Gervasi et al. (Eds.): ICCSA 2018, LNCS 10962, 1, https://doi.org/10.1007/978-3-319-95168-3 15 (2018).

Di Felice, P. Teaching geographical databases at the engineering master level: learner-centred approach vs. teacher-centred approach, European Journal of Engineering Education 2018, DOI: 10.1080/03043797.2017.1421904

Di Felice P., Di Felice A., Evangelista M., Fraticelli A., Venturoni L. (2017) Identification of High-Risk Hotspots Along Railway Lines. In: Gervasi O. et al. (eds) Computational Science and Its Applications – ICCSA 2017. Workshop on Geographical Analysis, Urban Modeling, Spatial Statistics. Lecture Notes in Computer Science, Vol 10407. Springer, Cham, 317-331. DOI: https://doi.org/10.1007/978-3-319-62401-3_24.

RELEVANT PUBLICATIONS

Clementini, E. and Di Felice, P. A Comparison of Methods for Representing Topological Relationships, Information Sciences 1995, Num.3 (149-178).

Clementini, E. and Di Felice, P. A Model for Representing Topological Relationships among Complex Geometric Features in Spatial Databases, Information Sciences 1996, Vol. 90, Num.1-4 (121-136).

Clementini, E. and Di Felice, P. Approximate Topological Relations, International Journal of Approximate Reasoning 1997, Vol.16 (173-204).

Clementini, E. and Di Felice, P. Topological Invariants for Lines, IEEE Transactions on Knowledge and Data Engineering 1998, Vol.10, Num.1 (38-54).

Clementini, E. and Di Felice, P. and Koperski, K. Mining multiple-level association rules for objects with a broad boundary, *Data and Knowledge Engineering*, vol.24, n.3 (2000), 251-270.

Clementini, E. and Di Felice, P. A spatial model for complex objects with a broad boundary supporting queries on uncertain data, *Data and Knowledge Engineering*, vol.37, n.3 (2001), 285-305.

Cicerone, S., Frigioni, D. and Di Felice, P. A General Strategy for Decomposing Topological Invariants of Spatial Databases and an Application, *Data and Knowledge Engineering*, vol. 42, n. 1 (2002), 57-87.

Cicerone, S. and Di Felice, P. Cardinal directions between spatial objects: the pairwise-consistency problem. *Information Sciences*, 164, 2004, 165-188. Elsevier Science.

TEACHING

Databases (Bachelor of Computer science) and *Spatial Databases* (Master of Computer science), University of L'Aquila.