

Letizia Tanca

Web Sites:

[http://tanca.faculty.polimi.it/;](http://tanca.faculty.polimi.it/)

<https://dblp.uni-trier.de/pers/hd/t/Tanca:Letizia>

Letizia Tanca graduated in Mathematics at the University of Naples with a thesis in Mathematical Logic, and in 1987 earned her PhD in Applied Mathematics and Computer Science. Since 1998 she is with Politecnico di Milano as a full Professor (Department of Electronics, Information and Bio-Engineering - DEIB). During her career, she has taught courses on the Foundations of Computer Science, Databases, and Methodologies and Technologies for Information Systems. She has served as: Chair of the Board of Studies in Computer Engineering (Milan); Director of the Computer Science Area of DEIB; Representative for POLIMI at the Informatics Europe Society, EU¹; and currently is Vice Chair of the Italian National Group of Computer Engineers (GII)², whose objective is to organize, coordinate and promote the Italian academics in Engineering Computer Science. In the last three years she has represented, as external member, the Faculty of Science and Technology within the Research Committee of the University of Bolzano.

Letizia Tanca is the author of approximately 190 international publications on databases and the theory of databases.

Notably, with her PhD thesis, subsequent papers (among which the VLDB 1987 Best Student Paper Award), and the book "Logic Programming and Databases", she contributed to the understanding and development of the common basis of databases and artificial intelligence. Subsequent research contributions involve the theory of deductive and active databases, object-oriented, graph-based query languages, the semantics of databases, representing and querying semi-structured information and the World Wide Web. Later on, she contributed with seminal papers to the birth of the research on personalization and context-awareness, and is now interested in the ethical issues inherently involved in the use of data analysis techniques, especially with reference to the initial steps of the data analysis process, namely source selection and integration.

As a research group leader, she tutored several PhD students and young researchers on topics including: the logical principles of databases, personalization and design of context-aware databases and applications; integration of data for context-based, pervasive data management; data analysis methods to support Big Data. She is the author of an invited post in the ACM SIGMOD BLOG called "Wisdom: a double –V for Big Data", advocating the thesis that today the database community is called give a highly valuable contribution to put analytics into direct use. The data available for knowledge induction are so abundant that — provided that the sources and means of extraction are reliable and ethically correct— the knowledge obtained can be based on massive evidence. Therefore, we are called to devise suitable computation and storage means, so that these ambitious techniques can be reliably applied to the amount of information that makes the difference.

Letizia Tanca has been regularly invited as a speaker at international conferences and workshops, and to teach doctoral courses in various universities. She acts as a reviewer for international journals (e.g. TODS, VLDB Journal, TPLP, Information Systems...) since about 1987, and for national and international projects (recently, ERC 2018). She is regularly a member of the Program Committees of the top international conferences on Data management (VLDB, SIGMOD, ICDE, ECML/PKDD, KDD, EDBT, CIKM). Notably, she has been Demo Chair at VLDB 2013, Associate Editor of PVLDB 2014 and of CIKM 2018, and panel chair of VLDB 2019.

Since 2015 she is involved in the European projects IT2Rail, ST4RT, GoF4R, SPRINT and Ride2Rail, all within the Shift2Rail Initiative⁴ for ensuring a modal shift from roads towards sustainable modes of transportation. Currently she is coordinator for PoliMI in: RECKON (Real-world, Context-aware, Knowledge-based Lab) for the assessment and prevention of accidents at work in the Manufacturing Area, funded by INAIL; SHELL (Technologies for Living Environments) , funded by the Italian Government. In 2014, Letizia Tanca received an IBM Faculty Award for the SMAC project: Situational Mobile Applications.

¹<http://www.informatics-europe.org/>

²<http://www.gii.it/>

³http://wp.sigmod.org/?author_name=letiziatanca

⁴<https://shift2rail.org>