CLAUDIO SARTORI
Claudio.Sartori@Unibo.it

Full Professor of Information Processing Systems
University of Bologna

TEACHING ACTIVITY

Full professor of “Systems for Information Processing” in the Department of Computer Science and Engineering of the University of Bologna since 2001.

He Researcher in the Center for Studies on Computer-Operator Interactions, of the CNR, from 1984 to 1992, and associate professor in the University of Bologna from 1992 to 2001.

OTHER ACADEMIC POSITIONS

Coordinator of the Undergraduate and Master program in Computer Engineering since 2013.

Scientific director of the Master program in Data Science, offered by the Bologna Business School and the University of Bologna.

Director of the undergraduate program in Statistic Sciences, from 2007 to 2012; in this role, he promoted an internationalization project for a “Double degree undergraduate program” in “Statistics and Mathematics” with the University of Glasgow.

Director of the undergraduate program in Statistics and Informatics for Enterprises from 2001 to 2007.

Member of the board of teachers of the doctoral program in Computer Science and Engineering.

SCIENTIFIC ACTIVITIES

The research activity of Claudio Sartori started in 1983 in the areas of database access methods and database design, then he focused his interests in the areas of artificial intelligence, peer-to-peer systems and data mining. He published papers in international conferences and international journals, such as ACM Transactions on Database Systems e IEEE Transactions on Knowledge and Data Engineering, Information Systems.

Among his past scientific contributions, it is worth to mention the application of taxonomic reasoning techniques in the area of databases. This work started a new research area and made possible the development of algorithms for the validation of conceptual schemas and the optimization of queries. In particular, one of the last results was a theoretical work on semantic optimization of queries in object oriented databases. The work uses description logic to express descriptions of classes, queries, views and integrity constraints, and develops a set of semantic rewriting rules to incorporate in descriptions the entire

set of semantici implications. The expanded queries are used to find the most efficient execution plans. This work is based on a rigorous formal approach and has been implemented as a prototype http://www.dbgroup.unimo.it/ODB-Tools.html.

Since 2000, Claudio Sartori has been carrying out research in the area of data mining, both within coordinated projects and directing his research group (http://www-db.deis.unibo.it/research/DM/). The main topics addressed include clustering, classification and outlier detection. In particular, these techniques have been applied in distributed computing environments, developing families of algorithms able to run on networks of remote nodes, minimizing network traffic and maintaining high quality of the results. The above results have been published in refereed international journal and conferences, and it is worth to mention a "Best Paper Award" at the "15th Ibero-American Conference on Pattern Recognition, São Paulo, SP, Brazil", 2010. In this research area Sartori started a fruitful cooperation with the Machine Learning and Data Mining group of the Department of Informatics, Technical University Federico Santa Maria (UTFSM), Valparaiso, Chile.

PARTIAL SYNOPSIS OF PUBLICATIONS

About 100 publications, among them:

International journals	15
International books and book chapters	8
International refereed conferences	53