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Giovanni Danese was born in Maglie (Lecce) on 12th of June, 1956.

In 1975 he was one of the three winners of a competitive examination to access to Almo Borromeo College in Pavia. He lived in that college for the five years of the degree course in Electronics Engineering taking his degree summa cum laude. The professors supervising his thesis were Domenico Dotti and Ivo De Lotto. During the last year of his course he had a stage in the Science and Industry Dept. of Philips, in Eindhoven.

He was scholarship holder to contribute to the research activities of the Computer Engineering and Systems Science Dept. of the University of Pavia; then he was PhD student in the years 1983-1986, taking his PhD degree in Electronics and Computer Engineering, on September, 1987. His contribution to the researches of the Dept. went on inside contracts with CILEA and IBM.

Since 1989 until 1992 he was assistant professor in the Engineering Faculty of the university of Pavia; on 1992 he became Associate Professor in the field of the Computer Engineering. On 2001 he became full professor in the same field.

Since his degree taking he contributes to scientific researches sponsored by Italian National Research Council, Italian Education and Research Ministry, Institute for the Physics of Matter and University of Pavia.

Scientific activity of Giovanni Danese is in the following main fields:

Fault tolerance: in the first years of his activity he was concerned with designing computer modules able to give the hosting systems fault tolerant features by real time monitoring. Inside the different abstraction levels of the architecture of the computing systems he was interested in the lower levels, i.e. hardware structure and low level languages.

Parallel computing and special purpose computers: Giovanni Danese is concerned with the design of special purpose parallel computers and FPGA based accelerators devoted to scientific heavy computing problems. Several problems in the fields of the Physics of the Matter, of the Fluid dynamics and Neural Networks have been faced showing the effectiveness of the proposed approaches. Algorithms analysis also suggested the implementation of programming techniques to speed-up the convergence if the energy of dipolar and ionic systems must be evaluated.

Signal and image processing: the experience gained in the field of Hardware and Software was used to face different problems relative to design and test of computing systems for signal and image processing. In particular he designed digital systems controlled by microprocessors or DSPs for acquiring and processing biomedical data from sensors in the fields of rehabilitation, blood velocity profile evaluation and in vivo measurements of local changes in haemodynamics and oxygenation of human tissues.

Multiprocessor devices for artificial neural network (ANN) implementations: he is concerned in the evaluation of parallel architectures/processors in computational heavy applications. This activity involves ANNs used in typical real industrial applications, such as signal filtering or compression, recognition and control. These ANNs on either workstations or architectures that integrate existing microcomputers and microprocessors were implemented. Then a comparison among the performance of three such solutions for two real-time industrial applications was carried on. The most promising way to train and test an MLP neural network was identified.

In the course of the years he used several microprocessors and DSPs, taking care to HW and SW features.

Architectural designs and adopted implementation solutions were proposed to international conferences and relative papers submitted for the publication to international reviews.

The research work made Giovanni Danese acquiring autonomous design and test skill and the capability to lead the work of students and scholars involved in the research activities. He has been tutor for more than 60 degree in the fields of the Computer Engineering and 6 PhD thesis in Electronics and Computer Engineering.

For what concerns educational activity he was responsible for several courses in the field of the Information Technology; at present he teaches Computer programming and Computer Architecture in the Engineering Faculty of the University of Pavia.

Beyond education and research Giovanni Danese is involved in organization activities: since 2001 until 2007 he was head of the Computer Engineering and Systems Science Dept. of the University of Pavia, member of the direction committee of the Engineering Faculty and Director of the PhD school in Engineering. Since 2009 he is member of the board of directors of the University of Pavia. He received awards for his researches and he was invited speaker in international conferences. Since 1998 he is the leader of the Microcomputer laboratory of the Computer Engineering and Systems Science Dept. of the University of Pavia.

He was author of more than one hundred referred scientific publications.

He organized international conference, seminars and a national school for PhD students in Computer Engineering and Science.

He is referee of IEEE publications, member of Program Committee and referee for Euromicro PDP (Parallel and Distributed Processing) and DSD (Digital System Design) Conferences.

He is member of IEEE Computer Society.