Advanced DSP Design Techniques (July 6-10, 2015) at IIT Kharagpur

This course provide me a comprehensive coverage of techniques for designing efficient vlsi architecture for DSP and architectural optimization at block level as well as at logic level. the key issues that was discussed are graphical representation of DSP algorithms, Retiming for throughput maximization, bit serial digital adders, Speed power Area accuracy Trade off, Memory bandwidth management etc. The course had few Lab sessions to demonstrate digital design flow on FPGA and the issues covered are functional simulation, partitioning, placement, routing etc.

About the Speakers

Prof. Mrityunjoy Chakraborty obtained Bachelor of Engg. (1983), M.Tech. (1985) and Ph.D. (1994) from Jadavpur University, IIT Kanpur and IIT, Delhi respectively. He joined IIT, Kharagpur as a lecturer in 1994, where he presently holds the position of a full professor. Prof. Chakraborty has held many invited, visiting positions in reputed universities abroad. He is currently an associate editor of the IEEE Transactions on Circuits and Systems, Part I.Earlier, he served as an associate editor of the IEEE Transactions on Circuits and Systems, Part I (2004-2007) and part II (2008-2009), as a guest editor of the EURASIP JASP and a TPC member for many important IEEE conferences. The teaching and research interests of Prof. Chakraborty are in digital and adaptive signal processing, VLSI signal processing, wavelets and DSP for wireless communications, in which he has guided several Ph.D. students and published extensively.

Prof. Anindya Sundar Dhar obtained Bachelor of Engg. in Electronics and Telecomm.Engg from Bengal Engg. College (1987), followed by M.Tech. (1989) and Ph.D. (1994) from IIT Kharagpur. He is presently an associate professor in Electronics and Electrical Communication Engg., with teaching and research interests in VLSI architecture design for real ime signal processing and communication. Prof. Dhar is a key person in the various VLSI related activities in the institute and has been offering many challenging courses in this area over years, apart from carrying out guided, independent and sponsored research in the above areas.

(Pawan kr. Inaniya)

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Report

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