IIEST, Shibpur

Indian Institute of Engineering Science and Technology, Shibpur
(Formerly Bengal Engineering and Science University, Shibpur)

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Personal Information

Name: Dr.SudipGhosh.

Designation: Assistant Professor, School of VLSI Technology, IIEST Shibpur.

Academic Qualifications:

1. Ph.D. (Engineering), Indian Institute of Engineering Science and Technology, Shibpur (IIESTS), 2017.
2. M.S. (VLSI CAD), 2005
3. B.E. (Electronics & Communication Engineering), 2001

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Area of Research

1. FPGA and SoC based Digital Watermarking Architectures.
2. Synthesis and Verification of Digital circuits.
3. VLSI Testing.
4. Advanced Computer Architectures.
5. Image and Video signal processing hardware architectures.

Courses Undertaken

PG Courses

1. VLSI Testing (VLSI-903)

2. Advanced System Architecture (VLSI-904/1)
3. Synthesis and Verification Techniques (VLSI-1004)
4. SoC and Memory Design and Test (VLSI-1150/2)
5. Digital Signal Processing (VLSI-905/2)

Recent Publications

CONFERENCES

2006

[1] Nachiketa Das, SudipGhosh and H.Rahaman. "Detection of Single Stuck-at and Bridging Faults in Cluster Based FPGA architectures", in IEE national seminar EEDP-2006 on 12th March, 2006 at JIS College of Engineering, Kalyani, West Bengal, India.

2007

[2] SomsubhraTalapatra, SudipGhosh, C.Roychaudhuri, Biplab K. Sikdar and HafizurRahaman. "FPGA based Design and Implementation of Neural Network Compensators for Nanocrystalline MEMS pressure sensor" in VSI, TEQIP, DIT sponsored national conference on Design Techniques for modern electronic devices, VLSI and Communication Systems (DTVC- 2007) from 14th -15th May, 2007 at NIT Hamirpur ,Himachal Pradesh, India. pp. 183-188.

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2009

[4] SudipGhosh, Pranab Ray, Santi P Maity and HafizurRahaman "Spread Spectrum Image Watermarking with Digital Design" in IEEE International Advance Computing Conference(IACC 2009) from 6-7 March 2009 at Thapar University, Patiala, India. pp. 868 – 873.

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2010

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Url: http://dx.doi.org/10.1007/978-3-642-31494-0_49

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url: http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6305580

[8] SudipGhosh, SomsubhraTalapatra, Jayasree Sharma, NavonilChatterjee, HafizurRahaman and Santi P Maity, "Dual Mode VLSI Architecture for Spread Spectrum Image Watermarking using Binary Watermark" in 2nd International Conference on Communication, Computing & Security (ICCCS-2012) from 6-8 October 2012 at National Institute of Technology Rourkela, India. pp. 784-791.
url: http://dx.doi.org/10.1016/j.protcy.2012.10.095

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[12] SudipGhosh, BijoyKundu,DebopamDatta, Santi P Maity and HafizurRahaman "Design and Implementation of Fast FPGA based Architecture for Reversible Watermarking" in IEEE International

Conference on Electrical Information and Communication Technology (EICT-2013) from 19-21 December 2013, at Khulna University of Engineering and Technology (KUET), Khulna, Bangladesh. pp.1-6.
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[16] SudipGhosh, ArijitBiswas, Santi P Maity and HafizurRahaman "Design of an Improved Algorithm for Blind Digital Image Watermarking Using Both Grayscale and Binary Watermark in DFWHT Domain" in 8th IEEE International Conference on Electrical and Computer Engineering (ICECE 2014) from 20-22 December 2014 at Pan Pacific Sonargaon,Dhaka, Bangladesh. pp. 112-115.
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[3] SambaranHazra, SudipGhosh, Sayandip De and HafizurRahaman "FPGA implementation of semi-fragile reversible watermarking by histogram bin shifting in real time" in special issue of Springer journal of Real-Time Image Processing, pp 1-29, online from 22nd February 2017.
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