LIST OF PUBLICATIONS AND PRESENTATIONS

(Dr. Subhajit Das)

Publications in refereed (SCI) journals: 06

Book Chapters: 02

Presentation at international conferences: 06

International Journals (Published)

1. **Subhajit Das** and A. K. Sunaniya. "FPGA Implementation of High-fidelity Hybrid Reversible Watermarking Algorithm." **Journal of Microprocessors and Microsystems (Elsevier, IF: 3.503)**, Vol. 89, pp. 104442, 2022.

2. **Subhajit Das**, R. Maity, N. P. Maity and A. K. Sunaniya, "Efficient FPGA Implementation and Verification of Difference Expansion Based Reversible Watermarking with Improved Time and Resource Utilization", **Microprocessors and Microsystems (Elsevier, IF: 3.503)**, Vol. 83, pp: 103732, June 2021.

3. **Subhajit Das**, R. Maity, N. P. Maity and A. K. Sunaniya, "Efficient FPGA Implementation of Corrected Reversible Contrast Mapping Algorithm for Video Watermarking", ***Microprocessors and Microsystems (Elsevier, IF:* 3.503*)***, Vol. 76, pp: 103092, July 2020.

4. **Subhajit Das**, R. Maity, N. P. Maity and A. K. Sunaniya "Parallel Hardware Implementation of Efficient Embedding Bit Rate Control based Contrast Mapping Algorithm for Reversible Invisible Watermarking", ***IEEE Access (IEEE, IF: 3.725)***,Vol. 8, pp. 69072-69095, 2020

5. **Subhajit Das**, P. Singh and C. Koley, "Hardware Implementation of Adaptive Feedback Based Reversible Watermarking for Image Processing Applications", ***Microsystem Technologies (Springer, IF: 2.276)***, Vol. 10, pp. 3271-3287, 2020.

6. **Subhajit Das**, R. Maity and N. P. Maity, "VLSI Based Pipeline Architecture for Reversible Watermarking by Difference Expansion with High Level Synthesis Approach." ***Circuits, Systems & Signal Processing (Springer, IF: 2.225)***, Vol. 37, pp. 1575-1593. 2017.

International Journals (Submitted)

1. **Subhajit Das**, R. Maity, and N. P. Maity "Efficient FPGA and SoC Based VLSI Architecture of Adaptive Feedback Based Reversible Image Watermarking Algorithm", ***Journal of Circuits, Systems and Computers (World Scientific, IF: 1.333)****, Under Review, Manuscript Number: WPS-JCSC-D-17-00361.*

International Conferences (Published)

1. **Subhajit Das,** Neha Fegde and Arun Kumar Sunaniya, "VLSI based Architecture for Modified Reversible Contrast Mapping based Reversible Image Watermarking using Xilinx System Generator", Springer ICRTECS, 2019.

2. **Subhajit Das** and Arun Kumar Sunaniya, "A Study on Reversible Image Watermarking Using Xilinx System Generator", (available in **Springer Proceeding**), Springer CIPR, 2018.

3. **Subhajit Das** and Arun Kumar Sunaniya, "A Comparative Study of Reversible Video Watermarking Using Adaptive-Feedback and Non-Feedback based DE Method", (available in **Springer Proceeding**), Springer ICACNI, 2018.

4. Sudip Ghosh, Nachiketa Das, **Subhajit Das**, S.P. Maity and Hafizur Rahaman, "An Adaptive Feedback Based Reversible Watermarking Algorithm using Difference Expansion.", *IEEE RETIS (available in **IEEE Explore**). 2015.*

5. Sudip Ghosh, Nachiketa Das, **Subhajit Das**, S.P. Maity and Hafizur Rahaman, "Digital Design and Pipelined Architecture for Reversible Watermarking Based on Difference Expansion using FPGA. ", *IEEE ICIT (available in **IEEE Explore**), 2014.*

6. Niladri Pratap Maity, Reshmi Maity, Nishant Kumar and **Subhajit Das**, "Design a Low Noise CMOS Active Pixel Image Sensor", *Proc. In International Conference on Scientific Paradigm Shift in Information Technology and Management (**SPSITM-2011**), Kolkata, India, 2011.*

7. Sudip Ghosh, Nachiketa Das, **Subhajit Das**, S.P. Maity and Hafizur Rahaman, "FPGA and SoC Based VLSI Architecture of Reversible Watermarking Using Rhombus Interpolation By Difference Expansion.", *IEEE INDICON (available in **IEEE Explore**), 2014.*

Book Chapters:

1. **Subhajit Das** and Arun Kumar Sunaniya. “A Study on Reversible Image Watermarking Using Xilinx System Generator.” In Computational Intelligence in Pattern Recognition, pp. 219-235. Springer, Singapore, 2020.

2. **Subhajit Das** and A. K. Sunaniya, “A Comparative Study of Reversible Video Watermarking Using Automatic Threshold Adjuster and Non-feedback-Based DE Method.” Smart Computing Paradigms: New Progresses and Challenges", 1, p.77-86. Springer, Singapore 2018.

Patent

1. Granted a German patent with file number 202022102588.6. **Subhajit Das**, R. Maity, and N. P. Maity , Title of the patent is “ A system for a novel efficient embedding bit rate control based contrast mapping algorithm for reversible invisible watermarking.” on 17th July, 2022.

WORKSHOP/ SYMPOSIUM/CONFERENCE ATTENDED

8. Participated in national workshop on “Advance in Electronics, Communication and Information Technology (AECI-2011)” at Mizoram University, Aizawl, during March 23rd to 25th, 2011.

9. Participated in “One Day National Workshop on “Electronic Device” organized by department of ECE, Mizoram University and IEEE-EDS Calcutta Section at Mizoram University, Aizawl, on April 7th, 2011.

10. Participated in one day national workshop on “Recent Trends in Electronics and Communication” organized by department of ECE, Mizoram University at Mizoram University, Aizawl, on November 1st, 2011.

11. Participated in national workshop on “Advances in Pattern Analysis and Applications ” organized by department of ECE, Mizoram University at Mizoram University, Aizawl, during March 5th to 9th, 2012.

12. Participated in two days hands on workshop on “Virtual Instrumentation Technology by LabVIEW based Platform” at SUIIT Campus, Sambalpur University, during August 23rd to 24th, 2013.

13. Participated in two days workshop on “Microcontroller & Its Application” at SUIIT, Burla, during November 17th to 24th, 2013.

14. Participated in two days workshop on "Techno Champ" 2013 organized by ProActive – infoSoft at SUIIT, Burla, Sambalpur University, during January, 20th to 21st, 2014.

15. Participated in national workshop on "Recent Advancements in Computer Science & Electronics Engineering for information Technology (RACEIT-2015)" at SUIIT, Sambalpur University, Jyoti Vihar, Burla, sponsored by DRDO, during January 15th to 17th, 2015.

16. Participated in one week hands on workshop on "Data Acquisition and LabVIEW Applications" organized by department of EIE, NIT Silchar at NIT Silchar, in association with AvGarde Systems under the aegis TEQIP-III, during March 21st to 26th, 2018.

17. Participated in one week GIAN course on "Innovation & Technology Enterprise: Idea to Entrepreneurship" organized by department of EIE, NIT Silchar at NIT Silchar, under the aegis TEQIP-III, during 30th July to 10th August, 2018.

18. Participated in two days INUP familiarization on workshop on "Nanofabrication Technologies" at NIT Silchar, Assam, during January 28th to 29th, 2019.

19. Participated in one week hands on workshop training on "MATLAB Applications in Control System & Signal Processing" organized by department of EIE, NIT Silchar at NIT Silchar, during August 18th to 22nd, 2019.

Short term Courses

1. Participated in one week short term course on "Recent Trends in Communication, Signal Processing & Solid State Devices" organized by department of EIE, NIT Silchar at NIT Silchar, under the aegis TEQIP-III, during March 13th to 27th, 2018.

2. Participated in faculty development programme on "VLSI Design using FPGA Tools" organized by E&ICT Academy IIT Guwahati in association with NIT Mizoram and support from CoreEL Technology at department ECE, NIT Mizoram, under the aegis TEQIP-III, during March 05th to 11th, 2018.

Technical Committee Members

1. Worked as event manage in "Techno Champ" 2013 organized by ProActive –infoSoft at SUIIT, Burla,Sambalpur University, during January, 20th to 21st, 2014.

2. Provided valuable service as a committee member for organizing one week short term course on "Recent Trends in Communication, Signal Processing & Solid State Devices"

organized by department of EIE, NIT Silchar at NIT Silchar, under the aegis TEQIP-III, during March 13th to 27th, 2018.

3. Provided valuable service as a committee member for organizing GIAN course on "Innovation & Technology Enterprise: Idea to Entrepreneurship" organized by department of EIE, NIT Silchar at NIT Silchar, under the aegis TEQIP-III, during 30th July to 10th August, 2018.

Research Paper/ Poster Presentation

1. Participated in Poster presentation in Anveshan 2.0 organized by NIT Silchar, Assam, India, during January 10th to 12th, 2020.

2. Presented the paper title "VLSI based Architecture for Modified Reversible Contrast Mapping based Reversible Image Watermarking using Xilinx System Generator", Springer ICRTECS, at NIT Silchar, Assam, India, 2019.

3. Presented the paper title "A Study on Reversible Image Watermarking Using Xilinx System Generator", Springer CIPR, at NIT Silchar, Assam, India, 2018.

4. Presented the paper title, "A Comparative Study of Reversible Video Watermarking Using Adaptive-Feedback and Non-Feedback based DE Method", Springer ICACNI, at NIT Silchar, Assam, India, 2018.

5. Presented the paper title "An Adaptive Feedback Based Reversible Watermarking Algorithm using Difference Expansion.", IEEE RETIS, at Jadavpur University, Kolkata, India, 2015.

6. Presented the paper title "Digital Design and Pipelined Architecture for Reversible Watermarking Based on Difference Expansion using FPGA.", IEEE ICIT, at Bhubaneswar, India, 2014.

7. Presented the paper title "FPGA and SoC Based VLSI Architecture of Reversible Watermarking Using Rhombus Interpolation By Difference Expansion.", IEEE INDICON, at Pune, India, 2014.

8. Demonstrated a project in "Microcontroller & Its Application" at SUIIT, Burla, during November 17th to 24th, 2013.

9. Presented the paper title “Design a Low Noise CMOS Active Pixel Image Sensor”, Proc. In International Conference on Scientific Paradigm Shift in Information Technology and Management (**SPSITM-2011**), at Kolkata, India, 2011.