

Prof. Biplab Roy
Associate Professor,
Department of ECE
NITMAS

- 1) *Work Experience (Full Time):* 17 years (Academic)
- 2) *Association with the Institute in years :* 17 Years
- 3) *Under-Graduate (B.TECH), Post-Graduate (ME/MTECH) thesis supervised:*

More than 20 B.Tech and 5 M.Tech Projects/Thesis including:

- 1) Design of a DSP Processor with dedicated DSP instructions in FPGA
- 2) Design of a 32-bit GPP on FPGA.
- 3) Wireless and secured voting system.
- 4) Design of a two-pass assembler for 8051 uC.
- 5) Design of a small RTOS for PIC uC.
- 6) Design of a Graphic-Scientific-Touch-Calculator based on ARM Cortex-M3 uC.
- 7) Design of a Non-intrusive Blood pressure measurement system based on Photoplethysmographic data.

4) *Notable Publications :*

Journal Papers-

- 1) “Spintronic Device Based Power Efficient VLSI Chip Design for Universal Code Converter” published in “Canadian Journal of Pure & applied sciences”, vol 2, Nov 2008.

Conference Papers-

- 1) “Design of a coffee vending machine using single-electronic-devices”, pp 38-43, 2010 International Symposium on Electronic System Design, Bhubaneswar, India.
- 2) “IBM-Core-Connect (PLB bus) Compatible Encryptor soft-core”, INDICON 2010, Santiniketan.
- 3) “Platform-Independent UART soft-core”, pp 692-694, 2012 Third International Conference on Intelligent Systems Modeling and Simulation, Kota Kinabalu, Malaysia.
- 4) “Design of a Low Power 4x4 Multiplier based on Five Transistor (5-T) half Adder, Eight Transistor (8-T) Full Adder & Two Transistor (2-T) AND gate”-C3IT 2015, Academy of Technology, India.
- 5) “Cyclic Combinational Gate Diffusion Input (CCGDI) Technique- A New Approach of Low Power Digital Combinational Circuit Design”, The 2015 First International Conference on Electrical, Computer and Communication Technologies (ICECCT 2015), SVS college of Engineering, India.

5) Other activities and administrative roles and responsibilities:

Earlier-

As Project co-ordinator

As OIC , University Exam

Current-

As Mentor, 1st year ECE

As departmental coordinator, Placement Activity

Visiting Faculty, The Neotia University

6) Presently associated with Electrical Engineering Department, University of Calcutta and doing active research in Biomedical Signal Processing.