# RESUME

# Dr. KSHITIJ SHINGHAL

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## **OBJECTIVE**

Nurture the teaching learning process in a Technical Education Institute providing motivation, ambience and exposure to cutting edge technologies.

#### PRESENT EMPLOYMENT

Present Employer	:	Moradabad Institute of Technology, Moradabad
Designation	:	Associate Prof. (Department of E&C Engineering) &
		Associate Dean (Academics)
Total Work Experience	:	17 Years (16Yrs Teaching /Research + 1 Yrs industrial)

## ACADEMICS

- Ph.D. from Shobhit University in 2013.
- M.Tech in "Digital Communication" from "Uttar Pradesh Technical University" Lucknow with a CPI of 9.5 in scale of 10 in 2006.
- B.E in "Electronics Engineering" from Dr. J.J. Magdum College of Engineering affiliated from Shivaji University, Kolhapur in First Class with distinction with 66% marks in 1999.
- > Passed Intermediate from CBSE Board, with 65.0% marks in 1994.
- > Passed High School from CBSE Board with 78.0 % marks in 1992.

#### Ph.D. THESIS

"Development of Low Power Wireless Sensor Network Node - an SOC Approach" under the supervision of **Dr. Arti Noor** Reader CDAC Noida.

#### **M.TECH THESIS**

"Implementation of Customizable Logic Controller using VHDL" under the supervision of Dr. J.P. Saini Reader ECE Dept. BIET Jhansi.

#### **RESEARCH PAPERS/WORKSHOPS/JOURNALS**

#### In Referred journals: 38

- Manish Saxena, Nikhil Rastogi, Animesh Agarwal, Kshitij Shinghal, P.K. Bhatnagar "A Study of Te-Bi-Se Glass System at Various Heating Rates," Acta Cinencia Indica, Vol. XXVIIIP, pp. 73-76, Oct 2002.
- Kshitij Shinghal, Arti Noor, Neelam Srivastava, Raghuvir Singh (2010), "Wireless Sensor Networks in Agriculture: for potato farming", International Journal of Engineering Science and Technology (IJEST), Vol. 2 Issue 8, pp.3955-3963.
- Kshitij Shinghal, Arti Noor, Neelam Srivastava, Raghuvir Singh (2011), "Low Power pH Sensor for - Wireless Sensor Network Node Agricultural Application", International Journal of Advances in Engineering &Technology (IJAET), Vol. 1, No. 3, pp-197-203. DOI: 10.7323/ijaet/v1\_iss3\_22
- Kshitij Shinghal, Arti Noor, Neelam Srivastava, Raghuvir Singh (2011), "Intelligent Humidity Sensor For - Wireless Sensor Network Agricultural Application", International Journal of Wireless & Mobile Networks (IJWMN), Vol. 3, No. 1, pp- 118-128. DOI: 10.5121/ijwmn.2011.3111
- Kshitij Shinghal, Arti Noor, Neelam Srivastava, Raghuvir Singh (2011), "Power Measurements of wireless sensor networks node", International Journal of Computer Engineering & Science (IJCES), Vol.1, Issue 1, pp 8-13.
- 6. Kshitij Shinghal, Arti Noor, Neelam Srivastava, Raghuvir Singh (2011), 'A novel approach for Energy Management in Wireless Sensor Networks Nodes', MIT

International Journal of Electronics and Communication Engineering Vol. 1, No.2, pp. 91-96.

- Kshitij Shinghal, Arti Noor, Neelam Srivastava, Raghuvir Singh (2011), 'Custom Single Purpose Processor Design: For Low Power WSN Node', International Journal of Recent Trends in Electrical & Electronics Engg. (IJRTE), Volume 1 Issue 1, pp. 15-24.
- Amit Sharma, Kshitij Shinghal, Neelam Srivastava, Raghuvir Singh (2011), "Energy Management for Wireless Sensor Network Nodes", International Journal of Advances in Engineering &Technology (IJAET), Vol. 1,Issue 1, pp.7-13.
- Amit Sharma, Kshitij Shinghal, Neelam Srivastava (2012), 'Design and Performance Analysis of Energy Efficient Routing Algorithm for Wireless Sensor Network', International Journal of Engineering Research and Applications (IJERA), Vol. 2, Issue 6, pp 816-821.
- Narendra Singh Pal, R. K. Sarin, Kshitij Shinghal, Ritu Rajan, "Distributed Arithmetic Algorithm for Raised Cosine FIR Filter in WCDMA" System, in MITIJEC, Vol. 2, No. 1, Jan. 2012.
- Akhilesh Shukla, Kshitij Shinghal, V.K. Pandey, "Analysis of Gyrotron as Fast Wave Device", MITIJEC Vol. 2 No. 1 Jan. 2012 pp. 30-33.
- 12. Kshitij Shinghal, Arti Noor, Neelam Srivastava, Raghuvir Singh (2013), 'A New Paradigm of Energy Management for Wireless Sensor Networks Node', International Journal of Contemporary Research in Engineering and Technology (IJCRET), Vol. 2, Issue 1, pp 95-100.
- Amit Sharma, Kshitij Shinghal, P. V. Singh, Neelam Srivastava (2013) "Energy Efficient Routing Algorithm to Choose the Cluster that A Node Joins for Wireless Sensor Network", International Journal of Electronics & Communication Engineering Research (IJECER) Vol. 1 Issue 3, August – 2013 pp 69-73.
- Amit Sharma, Kshitij Shinghal P. V. Singh, Neelam Srivastava "Wireless Sensor Network Using Six Sigma Multi Hop Routing", IOSR journal of Electronics and Communication Engineering (IOSR-JECE), Volume - 6, Issue3, 2013.

- 15. Mayank Bhatnagar, Kshitij Shinghal, Prabhat Kr. Gupta & Sanjay Gurjar "AVSR Through HMM and Lip Tracking Method" in MIT International Journal of Electronics & Communication Engineering, pp. 14–19, Vol. 3, No. 1, Jan 2013.
- 16. Amit Sharma, Kshitij Shinghal, Pushpendra Vikram Singh "On Demand Routing Protocols for Mobile ad hoc Network" in MIT International Journal of Electronics & Communication Engineering, Vol. 4, No. 1, Jan 2014.
- 17. Amit Sharma, Kshitij Shinghal, Pushpendra Vikram Singh, Sameer Anand, Neeraj Kumar Verma, "Table Driven Routing Protocols for Ad Hoc Mobile Network" in Progress in Science and Engineering Research Journal (PISER 14), Vol.02, Issue: 04/06 July-August, 2014.
- Kshitij Shinghal "Intelligent Multi Sensor System for Agricultural Fire Detection" in MIT International Journal of Electronics & Communication Engineering, pp. 7–11,Vol. 4, No. 1, Jan 2014.
- Akhilesh Shukla, Kshitij Shinghal, Manish Saxena, Nitin Kumar & V. K. Pandey "Gyrotron Development Review: Operational Principle and Interaction Structure" in MIT International Journal of Electronics & Communication Engineering, pp. 44–48,Vol. 4, No. 1, Jan 2014.
- 20. Amit Sharma, Kshitij Shinghal, Pushpendra Vikram Singh, Himanshu Verma "Multipath Routing Protocols for Mobile Ad Hoc Network" in International Journal of Technical Research and Applications (IJTRA), Volume 2, Issue 5, Sep-Oct, 2014.
- 21. Amit Sharma, Kshitij Shinghal, Pushpendra Vikram Singh, Himanshu Verma "Pervasive Computing: Past, Present and Future" in International Journal of Electronics & Communication Engineering MIT, MITIJEC, Vol.05, No. 1, pp-27-30, Jan 2015.
- 22. Puneet Khanna, Kshitij Shinghal, Arun Kumar, "A Survey of Defected Wideband and Multiband Microstrip Patch Antennas", International Journal for Scientific Research & Development (IJSRD), Vol. 3, Issue 04, pp-2043-2047, 2015.
- Amar Sharma, Kshitij Shinghal, Arun Kumar, "A Survey on Structure-Shaped Wideband Microstrip Patch Antennas", International Journal of Research and Scientific Innovation (IJRSI), Volume II, Issue VIII, pp-62-66, August 2015.

- 24. Nishant Saxena, Kshitij Shinghal, "Extraction of Various Features of ECG Signal", International Journal of Engineering Sciences and Emerging Technologies (IJESET), Vol. 7, Iss. 4, pp. 707-714, 2015.
- 25. Amit Saxena, Deepti Shinghal, Kshitij Shinghal "Design and Implementation of Adiabatic based Low Power Logic Circuits", International Research Journal of Engineering and Technology (IRJET), Volume2, Issue-2, pp-498-504, May 2015.
- 26. Shuchita Saxena, Kshitij Shinghal, "Comparison of Performance Characteristics of Gap Coupled Annular Ring Microstrip Antenna and a Frequency Agile Gap Coupled Annular Ring Microstrip Antenna in C Band", International Journal of Scientific Research and Management Studies (IJSRMS), Volume 2 Issue 5, pg: 265-270, Aug., 2015.
- 27. Nitin Bhatnagar, Kshitij Shinghal, Amit Saxena, Niket Tiwari, Shubham Bhatnagar, Shushant Kumar, "E-Cradle", International Journal of Scientific Research and Management Studies (IJSRMS), Volume 2 Issue 10, pg. 399-404, March 2016.
- Amit Saxena, Kshitij Shinghal, Deepti Shinghal, "An Efficient Adiabatic Switching Circuit Design For Low Power Applications", - International Journal of Engineering Sciences & Emerging Technologies (IJESET), Volume 8, Issue 6, May 2016, pp: 282-289.
- 29. Nitin Bhatnagar, Kshitij Shinghal, Amit Saxena, Niket Tiwari, Shubham Bhatnagar, Shushant Kumar, "Design of Automatic & Indigenous Ecradle", Imperial Journal of Interdisciplinary Research (IJIR), Vol-2, Issue-6, pp. 328-333, Apr. 2016.
- 30. Nishant Saxena, Kshitij Shinghal, "ECG Signal Denoising: A New Approach", International Journal of Engineering Sciences & Emerging Technologies, Volume 9, Issue 1, pp: 18-24, July 2016.
- 31. Nishant Saxena, Kshitij Shinghal, "A New approach for the Pattern Recognition and Classification of ECG Signal", International Journal of Advances in Engineering & Technology, Vol. 9, Issue 4, pp. 513-523, Aug., 2016.
- 32. Puneet Khanna, Amar Sharma, Kshitij Shinghal, and Arun Kumar, "A Defected Structure Shaped CPW-Fed Wideband Microstrip Antenna for Wireless Applications", Journal of Engineering, Hindawi Publishing Corporation, Volume 2016.

- 33. Puneet Khanna, Kshitij Shinghal, and Arun Kumar, "Multi-band Annular Ring Microstrip Antenna with Defected Ground Structure for Wireless Communication", International Journal of Computer Applications (0975 – 8887), Volume 135 – No.2, February 2016.
- 34. Amit Sharma, Ajay Kumar Yadav, Kshitij Shinghal,, "Advance Techniques of Dispersion Compensation in WDM Optical Fiber Communication Networks", International Journal of Advanced Engineering Research and Technology (IJAERT), Volume 4 – Issue.5, May 2016.
- 35. Manjari Sharma, Ajay Kumar Yadav, Kshitij Shinghal,, "Substantiation & Analysis of A MOSFET Compact Model Using BSIM3V3.2.2", International Journal of Advanced Engineering Research and Technology (IJAERT), Volume 4 – Issue.5, May 2016.
- 36. Amar Sharma, Puneet Khanna, Kshitij Shinghal, and Arun Kumar, "Design of CPW-Fed Antenna with Defected Substrate for Wideband Applications", Journal of Electrical and Computer Engineering, Hindawi Publishing Corporation Volume Article ID 6546481,10 pages, 2016. <u>http://dx.doi.org/10.1155/2016/6546481</u>
- 37. Aastha Gupta, Kshitij Shinghal, Akshay Goyal, Akash Diwakar, Kanika Rastogi, A Technical Approach for Cleaner India", International Journal of Innovative and Emerging Research in Engineering, Volume 4, Issue 2, 2017.
- 38. Narendra Singh Pal, Shyam Lal and Kshitij Shinghal, "Modified Visibility Restoration-Based Contrast Enhancement Algorithm for Colour Foggy Images", IETE Technical Review, Taylor And Francis, 2017 <u>http://dx.doi.org/10.1080/02564602.2016.1276868</u>

#### **In Conference Proceedings: 40**

- Kshitij Shinghal, Arti Noor, Neelam Srivastava, Raghuvir Singh (2011), "Energy Aware Transceiver for– Next Generation Wireless Sensor Network Node", International Conference on Advances in Electrical & Electronics Engineering, ICAEEE-2011.
- Kshitij Shinghal, Arti Noor, Neelam Srivastava, Raghuvir Singh (2011), 'Energy Efficient WSN Node - For Agricultural Application', National Conference on VLSI Design & Embedded Systems (NCVDES-2011), October 12-14, 2011, pp. 87-92.

- Kshitij Shinghal, Arti Noor, Neelam Srivastava, Raghuvir Singh (2011), 'Energy Aware WSN Node-For Agricultural Application, 2<sup>nd</sup> National Conference on Global Trends and Innovations in Computer Application & Informatics on 9-10 April, 2011, pp. 146-149.
- Kshitij Shinghal, Arti Noor, Neelam Srivastava, Raghuvir Singh (2009), 'Design of Systems on a Chip: An Introduction', National Conference on Emerging Technologies, NCET-2009, January 24-25, 2009, pp. 112-114.
- Kshitij Shinghal, Arti Noor, Neelam Srivastava, Raghuvir Singh (2009), 'The New Era of Wireless Sensor Network: A Survey', National Conference on Emerging Technologies, NCET-2009, January 24-25, 2009, pp. 144-147.
- Amit Saxena, Dinesh Chandra, Kshitij Shinghal, Shuchita Saxena, "Embedded system based swarm surveillance robot," National conference on Emerging Trends in Embedded Technology, at SGIT, Ghaziabad, February 14, 2009.
- Kshitij Shinghal, Amit Saxena, Nishant Saxena, Deepti Shinghal, Shuchita Saxena, "Robot smart vision sensors-a mechatronics application", National Conference on advances in Mechanical Engineering, NCAME-2009.
- Deepti Shinghal, Dinesh Chandra, Kshitij Shinghal, Amit Saxena, "SoC design with programmable logic IP cores," National conference on Emerging Trends in Embedded Technology, at SGIT, Ghaziabad, February 14, 2009.
- Tushar Pandey, Amit Saxena, Kshitij Shinghal, "Reduction of delay in execution of floating point quantities in DLX processors," National Conference on Emerging Technologies (NCET-09) at MIT, Moradabad, January 24-25, pp. 262-265.
- Deepti Shinghal, Dinesh Chandra, Kshitij Shinghal, Amit Saxena, "Fault testing and diagnosis of microprocessors," National Conference on Emerging Technologies (NCET-09) at MIT, Moradabad, January 24-25, pp. 249-252.
- Deepti Shinghal, Amit Saxena, Kshitij Shinghal, Shuchita Saxena, Nishant Saxena, "SOC Design with FPGAs using HDLs", National Conference on Emerging Technologies (NCET-09) at MIT, Moradabad, January 24-25, pp. 266-268.
- Kshitij Shinghal, Amit Saxena, Deepti Shinghal, Shuchita Saxena, Nishant Saxena, "System-on-a-Chip Verification: A Survey", National Conference on Emerging Technologies (NCET-09) at MIT, Moradabad, January 24-25, pp. 275-279.

- Kshitij Shinghal, Arti Noor, Amit Saxena, Deepti Shinghal, "Design of Systems on a Chip: An Introduction", National Conference on Emerging Technologies (NCET-09) at MIT, Moradabad, January 24-25, pp. 280-283.
- 14. Kshitij Shinghal, Arti Noor, Neelam Srivastava, Amit Saxena, "Instrumenting the World with Wireless Sensor Network: A Survey", National Conference on Emerging Technologies (NCET-09) at MIT, Moradabad, January 24-25, pp. 299-302.
- 15. Amit Saxena, Dinesh Chandra, Kshitij Shinghal, "Swarm Intelligence Model For Robotics Application In Mobile Surveillance", National Conference on Emerging Technologies (NCET-09) at MIT, Moradabad, January 24-25, pp. 220-226.
- 16. Deepti Shinghal, Dinesh Chandra, Kshitij Shinghal, Amit Saxena, "Microprocessor based Fault Tolerant Mechatronics System", National Conference on advances in Mechanical Engineering, NCAME-2009.
- Kshitij Shinghal, Nishant Saxena, Shuchita Saxena, "A New Approach for the Designing and Construction of Pacemaker," National Conference on Electrical Systems and Control Technologies (ESCT 2007) at National Institute of Technology Calicut, pp. 3-7, 03-05 May, 2007.
- Kshitij Shinghal, Nishant Saxena, Amit Saxena, "Swarm Intelligence- DCC Model for Robotics," National Conference on Advancement of Technologies 'Global Scenario' at GLA Mathura, 25-27 Feb 2007.
- Amit Saxena, Kshitij Shinghal, Deepti Shinghal, "System on Chip," International Conference on Industrial and Information Systems at University of Peradeniya, Srilanka, 8-11 August 2007.
- 20. Nishant Saxena, Shuchita Saxena, Kshitij Shinghal, "A New Approach for the Transmission of Biological Waveforms," International Conference on Industrial and Information Systems at University of Peradeniya, Srilanka, 8-11 August 2007.
- 21. Kshitij Shinghal, Amit Saxena, Nishant Saxena, Deepti Shinghal, "Synthesis Description of VHDL Based Self Checking Circuits," National Conference on Trends in VLSI and Embedded Systems at Indian Microelectronics Society, Chandigarh, 17-18 August 2007.
- 22. Kshitij Shinghal, Amit Saxena, Nishant Saxena, Deepti Shinghal, "Intelligent Robotics Application for Underground Cabling," National Conference on Artificial Intelligence at Vidya Pratisthan`s College of Engineering, Baramati Pune, 1-2 June 2007.

- 23. Kshitij Shinghal, Amit Saxena, Deepti Shinghal, Shuchita Saxena, "Microcontroller Based Swarm Surveillance Robot," National Conference on Artificial Intelligence at Vidya Pratisthan's College of Engineering, Baramati Pune, 1-2 June 2007.
- 24. Deepti Shinghal, Amit Saxena, Kshitij Shinghal, "Three Wheeled Microcontroller Robot Movement Control," International Conference on Modelling and Simulation, at Coimbatore Institute of Technology, Coimbatore, 27-29 August 2007.
- 25. Kshitij Shinghal, Nishant Saxena, Amit Saxena, "Swarm- PCC Model for Robotics," National Conference on Power Electronics & Intelligent Control, at MNIT Jaipur, March 17-18, 2007.
- 26. Kshitij Shinghal, Shuchita Saxena, Amit Saxena, "RISC-Microprocessor With Single Fault Tolerance," MIT Transactions, vol.1, pp. 47-52, March 2007.
- 27. Deepti Shinghal, Kshitij Shinghal, Nishant Saxena, "Dynamically Reconfigurable Hardware For Microcontroller," MIT Transactions vol.1, pp. 153-162, March 2007.
- Shuchita Saxena, Deepti Shinghal, Kshitij Shinghal, "Multi-Mode Digital IF Receivers in 3-G and 4-G Mobile Communication Environments", MIT Transactions vol.1, pp. 198-203, March 2007.
- 29. Tushar Pandey, Amit Saxena, Deepti Shinghal, Kshitij Shinghal, "How to Protect IC Damage from and Electro Static Discharge [ESD]," National Symposium on Emerging Trends in Engineering and Technology at MIT Moradabad, 20-21 July 2007.
- 30. Kshitij Shinghal, Shuchita Saxena, Nishant Saxena, Deepti Shinghal, "Microprocessor with Multiple Fault Tolerance," National Symposium on Emerging Trends in Engineering and Technology at MIT Moradabad, 20-21 July 2007.
- 31. Kshitij Shinghal, Deepti Shinghal, J.P. Saini, "Implementation of a Customizable Logic Controller Using VHDL," National Symposium on Emerging Trends in Engineering and Technology at MIT Moradabad, 20-21 July 2007.
- 32. Nishant Saxena, Shuchita Saxena, Kshitij Shinghal, Amit Saxena, "Microcontroller Based Handheld ECG Logger," National Symposium on Emerging Trends in Engineering and Technology at MIT Moradabad, 20-21 July 2007.
- 33. Shuchita Saxena, Nishant Saxena, Kshitij Shinghal, "Constraint-driven Power Management for Embedded Systems," National Symposium on Emerging Trends in Engineering and Technology at MIT Moradabad, 20-21 July 2007.

- 34. Nishant Saxena, Shuchita Saxena, Kshitij Shinghal, "A Survey on In Body Robotics," International Conference on Computer Aided Engineering at IIT Madras, 13-15 Dec 2007.
- 35. Amit Sharma, Kshitij Shinghal, Neelam Srivastava, Himanshu Verma, P V Singh "EEDSAP- Energy Efficient Directional Source Aware Protocol Wireless Sensor Network" in International Conference on Advance in Electrical Electronic And Computer Engineering (ICAEECE), March 8-9, 2014.
- 36. Low Power Adiabatic Switching Circuits A Review, Deepti Shinghal, Amit Saxena, Arti Noor, Kshitij Shinghal, International Conference on Advances in Electrical Electronics & Computer Engineering (ICAEECE 2014) at MIT, Moradabad, March 8-9, 2014.
- 37. A Review of Energy Dissipation for Adiabatic Switching of CMOS based Logic Circuits, Amit Saxena, Deepti Shinghal, Dr. Arti Noor, Kshitij Shinghal, International Conference on Advances in Electrical Electronics & Computer Engineering (ICAEECE 2014) at MIT, Moradabad, March 8-9, 2014.
- 38. Akash Diwakar, Kshitij Shinghal, Aastha Gupta, Akshay Goyal, Kanika Rastogi, "Garbage Bins Status Monitoring using Ultrasonic Sensor", National Conference on Advances in Communication Engineering & Sensor Technology (ACEST-2016), 5th Nov, 2016, pp 10-13.
- 39. Kanika Rastogi, Akash Diwakar, Kshitij Shinghal, Aastha Gupta, Akshay Goyal, "A Review on Waste Management", International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE), Vol. 4 Iss. 9, pp-15833-15837, September 2016.
- 40. Narendra Singh Pal, Shyam Lal and Kshitij Shinghal, "An Improved Method for Visibility Enhancement of Foggy Images", International Conference on Emerging Trends in Electrical, Electronics and Sustainable Energy Systems (ICETEESES–16) IEEE, 2016

#### **Book Published: 02**

A Book titled "Switching Theory" ISBN 935140224x for simplifying the concepts of Digital Electronics published by Pragati Prakashan, Meerut. A Book titled "Networks & System" ISBN 8183981186 for simplifying the concepts of Network Analysis published by Pragati Prakashan, Meerut.

# Ph.D. THESIS SUPERVISED

- Design and Performance Analysis of an Energy Efficient Routing Algorithm for Wireless Sensor Network, Research Scholar Mr. Amit Sharma completed from IFTM, Moradabad in 2015.
- Design of defected Microstrip Patch Antennas for Practical Applications, Research Scholar Mr. Puneet Khanna completed from IFTM, Moradabad in 2016.

## Ph.D. THESIS GUIDING

- Visibility Enhancement of Images under Bad Weather Condition, Research Scholar Mr. Narendra Singh Pal, UPTU, Lucknow.
- Efficient Adiabatic Switching Circuit Design for Low Power Applications, Research Scholar Mr. Amit Saxena, Monad University, Hapur.
- Design of Structure-Shaped Microstrip Antennas for Wideband Applications, Research Scholar Mr. Amar Sharma, IFTM University, Moradabad.
- A Defense Framework against Malware and Vulnerability exploits for Smartphones, Research Scholar Mr. Sunil Kumar, UPTU, Lucknow.

## **M-TECH THESIS GUIDED**

- Swarm Intelligence Model for Robotics by Mr. Amit Saxena from UPTU, Lucknow in 2009.
- DLX Processor by Mr. Tushar Pandey from UPTU, Lucknow in 2011.
- Low Power High Performance VLSI Circuit by Ms. Ruchi Singh from UPTU, Lucknow in 2011.
- Analysis of Gyratron on the basis of phase bunching and mode dispersion by Mr. A.
  K. Shukla from UPTU Lucknow in 2012.
- Design & Analysis of Microstrip Patch Antenna by Mr. Puneet Khanna from UPTU, Lucknow in 2012.

- Importance of Inductance on Interconnect Modelling by Ms. Anshika Sharma from UKTU, Dehradoon in 2016.
- Comparative Analysis of Tapered buffer on two different MOS channel length by Mr. Alok Pandey from UKTU Dehradoon in 2016.
- Advance Techniques of dispersion Compensation in WDM Optical Fiber Communication Networks by Mr. Amit Sharma from Mewar University, Rajasthan in 2016.
- Substantiation & Analysis of a MOSFET Compact Model Using BSIM 3V3.2.2 by Ms. Manjari Sharma from Mewar University, Rajasthan in 2016.

## **PROFESSIONAL MEMBERSHIPS**

- ➢ Life Member of ISTE.
- Life Member of International Association of Engineers (IAENG Membership No. 103970).
- Member of Instrumentation and Control Engineers Society (ICE-Society).
- Member of Computer Science Teachers Association (CSTA Membership No. 5126822).
- Member of International Association of Computer Science and Information Technology (IACSIT Membership No. 80333598).
- Member of International Association for Engineering & Technology (IAET Membership No. 5489657).
- Member of American Communication Association.
- Member of Indian Students Network (ISN).
- Member of Engineering and Scientific Research Group (ESRG).
- Member of Software and Computer Engineering Society (scesoc).
- Member of National Science Teachers Association (NSTA).

## **CONFERENCES ORGANIZED / REVIEWED / EDITORIAL BOARD**

- Co-chairman, International Conference on Advances in Electrical Electronics and Computer Engineering to be held on 8th and 9th March, 2014.
- Reviewer board member of International Journal of Scientific Engineering and Technology (IJSET).
- Program Committee Member of 4<sup>th</sup> International Conference on Wireless & Mobile Networks (WiMoN-2012), July 13-15, 2012.
- Co-chairman, International Conference on Advances in Electrical & Electronics Engineering (ICAEEE-2011) at MIT, Moradabad, February 25-26, 2011.
- Chief Editor of MIT IJEC.
- Co-chairman, National Conference on Emerging Technologies (NCET-09) at MIT, Moradabad, January 24-25, 2009.
- Reviewer, Technical Program Committee, National Symposium on Emerging Trends in Engineering and Technology at MIT Moradabad, 20-21 July 2007.
- > Reviewer of IEEE Conference on Wireless & Mobile Network.
- Editorial Board Member of IJMA.
- Editorial Board Member of International Journal of Wireless & Mobile Networks (IJWMN).
- Member Reviewer Board of IEEE Xplore ieeexplore.ieee.org/iel5/6138563/6144061/06144178.pdf
- Member Reviewer Board of International Journal of Engineering Trends and Technology(IJETT)
- Member Reviewer Board of International Journal of Recent Trends in Engineering and Technology(IJRTET)
- Member Reviewer Board of International Journal of Research Science (IJRS)
- Editorial Board Member of International Journal of Science, Management and Engineering Research (IJSMER)
- > Editorial Board Member of International Journal of Advances in engineering And

Technology (IJAET)

## WORKSHOPS ORGANIZED

- Two days workshop on robotics "ROBOBEAM" in collaboration with Robosoft Systems, Mumbai on 21-22 March'09 in MIT Campus.
- Two days workshop on "Integrated Circuits and VLSI Design" conducted by Deptt. of E&C Engg. in association with C-DAC, Noida & CEERI, Pilani, 20–21 Nov. 2009.
- Two days workshop on "PSPICE Software" in association with CDAC Noida, 10-11 April- 2009.
- Four days short term training program (STTP-2010) on "MATLAB & SIMULINK" at MIT Campus on 23-26 January 2010.
- One day workshop for faculty & non teaching staff titled "Hands on training of Instruments" on 27th March'2010 in collaboration with FIBCOM India.
- Two days workshop on robotics "SWARM ROBOTICS" in collaboration with Robosoft Systems, Mumbai on 27-28 March'2010 in MIT Campus.
- Two days workshop on "PSPICE Software" in association with CDAC Noida, 20-21 November' 2010.
- One days workshop on "Or-CAD PSPICE Simulation Suit Software" in association with EE&I Deptt., 10 January 2011.
- One week Faculty Development Program for Deptt. of Electronics Engineering on 01–06 Aug. 2011.
- Two Days Lab Staff Training Program for enhancement of technical Skills on 28-29 June, 2011.
- Two days workshop on "PSPICE Software" in association with CDAC Noida, 25–26 Feb. 2012.
- Two Days Lab Staff Training Program for Technical Enhancement on 24-25 July 2012.
- One week Faculty Development Program for Deptt. of Electronics & Communication Engineering on 30 July-04 Aug. 2012.

- Two Weeks Workshop on "Robotics Embedded System & MATLAB" in association with Continuing Edu. Cell, at MIT, Moradabad 01-15 July, 2013.
- Two Day Faculty Development Program for Deptt. of Electronics Engineering on 20– 21 Jan. 2014.
- One Day Entrepreneurship Awareness Program in association with District Industry Centre, Moradabad. The awareness program was organized under the "Prime Minister Employment Generation Program (PMEGP)" on 26<sup>th</sup> March 2015.

## **COURSES ATTENDED**

#### Workshops attended: 15

- 1. "VLSI Education" from 23.07.08 to 27.07.08 conducted by JSS Noida.
- 2. "Faculty Development Program" held on December 2006 conducted by ICFAI.
- "Teaching Methods and Improvement of Teaching Learning Process." Held on 31.01.2004 to 01.02.2004 conducted by I.I.T. Roorkee.
- 4. "Education Seminar" held on 08.09.2004 conducted by Agilent technologies
- "Faculty Development Program" held on 04.12.2004 to 05.12.2004 conducted by I.I.T. Roorkee.
- "Embedded Systems" from 14.07.02 to 15.07.02 conducted by Vinytics Peripherals, Shakharpur Delhi.
- "Personality Development" from 19.01.08 to 21.01.08 conducted by Prof. A.K. Ghosh I.T. B.H.U.
- "4<sup>th</sup> National Power Electronics Conference" on June 10, 2010 conducted by Deptt. of Electrical Engineering, IIT, Roorkee.
- "Practical Workshop on Embedded System Designs based on Microcontroller" on Feb.
  28-29, 2008 conducted by Institute of Engineering & Technology, Lucknow.
- Attended National conference of Role of Science & Technology Modern Era at MIT, Moradabad on 28 January 2012.

- Attended National Conference on emerging Issues and challenges in 2020 conducted by MIT College of Mgmt. & Faculty of Mgmt MIT, Moradabad on 3<sup>rd</sup> & 4<sup>th</sup> April 2012.
- 12. Two days workshop on Industrial Automation conducted by DIAC Educom Pvt. Ltd. from 9<sup>th</sup> Feb. to 10<sup>th</sup> Feb. 2015.
- 13. Three days workshop on Networking Simulation using Netsim Software conducted by Dellsoft Technologies Pvt. Ltd. from 4th May to 06th May 2016.
- 14. Two days IEEE workshop on Advance PCB Design & Circuit Simulation by IEEE in association with Dellsoft Technologies Pvt. Ltd. from 25<sup>th</sup> Oct. to 27<sup>th</sup> Oct. 2016.
- 15. One day IE workshop on "Industry Institute Partnership" by IE in association with CETPAS Technologies Pvt. Ltd. Roorkee on 20<sup>th</sup> Feb. 2017.

#### Number of Courses Attended: 15

- 1. "Embedded Systems" conducted by CETPA Roorkee from 15.07.07 to 06.08.07.
- 2. "Embedded Systems" conducted by CETPA Roorkee from 14.11.05 to 20.11.05.
- 3. "VLSI and VHDL" conducted by BIT Mappers Pune from 15.02.05 to 24.02.05.
- "Embedded Systems" conducted by CETPA Roorkee from 11.06.11 to 08.07.11 at MIT, Moradabad.
- "Emerging research trends in Engineering & Technology" FDP conducted by TEQIP-II, MHRD, Govt. of India, from 16.03.13 to 23.03.13
- 6. "Embedded Systems using 8051" conducted by CETPA Noida from 07.07.12 to 03.08.12
- "Robotryst-2012" conducted by Robosapians in association with IIT Kharagpur from 09.02.12 to 11.02.12.
- "Faculty Development Programme on Entrepreneurship" conducted by EDP Cell, MIT Moradabad from 4<sup>th</sup> Sept. to 10<sup>th</sup> Sept. 2014.
- "Induction Training Programme through ICT" conducted by NITTR, Chandigarh from 20<sup>th</sup> Jan. to 24<sup>th</sup> Jan. 2014.
- 10. "VLSI through ICT" conducted by NITTR, Chandigarh from 10<sup>th</sup> Mar. to 14<sup>th</sup> Mar. 2014.

- 11. "Electronic System Design and Prototyping: Tools & Methodologies-Synopsys University Symposium 2015", April 30th, 2015, New Delhi.
- "VLSI Design through ICT" conducted by NITTR, Chandigarh from 05th Oct.. to 09th Oct. 2015.
- 13. "MATLAB and its Hardware Interface through ICT" conducted by NITTR, Chandigarh from 11th Jan. to 15th Jan. 2016.
- 14. "Smart Grid & Renewable Energy Sources through ICT" conducted by NITTR, Chandigarh from 18th Jan. to 22th Jan. 2016.
- "Wireless Networks Through ICT" conducted by NITTR, Chandigarh from 2<sup>nd</sup> May. to 06<sup>th</sup> May. 2016.

## **PROJECTS UNDERTAKEN**

- Worked on Hygrochip Series Digital Humidity Sensors (available online at: www.sensorsportal.com/HTML/SENSORS/Humidity.htm).
- ▶ Worked on a project for Bentex New Delhi on PrePaid Energy Meters.
- ▶ Worked on a project on "Off Route Mines Passive Sensors" for DRDO.
- Worked on Nanomaterials/Nanotechnology in collaboration with department of Electronic Sciences, University of Delhi South Campus.
- > Worked on sponsored project of "CRO Study Kits" with Scientech, Indore.

## SIGNIFICANT PROJECTS GUIDED

- Weather satellite receiver.
- Robotic PCB drilling machine.
- Surveillance Robot.

## CAD TOOLS

HDL: Active HDL, Synplify Pro, Synplicity Pro, MultiHDl, Mentor Graphics Modelsim, Exemplar Leonardo Spectrum, FPGA Express, Xilinx ISE, Synapticad (Testbencher Pro)

- Simulation: Multisim, Circuit Creator, Electronics Workbench, Electronics Design Studio
- > PCB: Ultiroute, Eagle, Proteus, Mentor Pads PCB, CADSTAR, TINA PRO
- Microcontroller: MULTI-MCU, Topview Simulator, TS-Controls Emulator, UMPS
- Microprocessors: TASM, EMU 86 , MP-Simulator
- Robotics: StarLogo
- Layout: LASI
- **Communication:** Commsim

# SUBJECT TAUGHT

Satellite Communication, I.C. Technology, Digital system design using VHDL, Microprocessors, Microcontrollers, Embedded systems, etc.

## PRESENT ADDITIONAL PROFESSIONAL RESPONSIBILITIES

- Coordinator Entrepreneurship Development cell
- Chairman Central library Administrative committee
- Member of Admission Cell.
- Chief Editor of MIT IJEC

#### PAST PROFESSIONAL RESPONSIBILITIES

- > Head of the Department, Electronics and Communication Engineering Department
- Coordinator Research and Development team of Electronics and Communication Deptt.
- Coordinator of Admission Cell.
- > A.S. Exams of U.P Technical University, JEE, UPSEE.
- Member Editorial Board M.I.T. Transaction A Technical Journal of M.I.T.
- ➢ O.C. CAD of Electronics Lab.
- ➢ O.C. Microcontroller Lab.

- ➢ In-charge, Departmental Computers & Software.
- > Project In-charge, Department of Electronics Engineering.
- ▶ Member, Editorial board NSETET-2007

## ADDITIONAL PROFESSIONAL EXPERIENCE

- ➢ O.C. Time-Table of the Institute (2006-07)
- Member proctorial board for consecutive five years
- Coordinator department laboratories during NBA inspection
- Project in-charge for four consecutive years
- Seminar in-charge for four consecutive years
- Departmental O.C. timetable
- ➢ Auditor ISO 9002
- ▶ M.R. ISO 9002
- > OC publicity photography for annual function (UTKARSH) Three consecutive years.
- Developed following labs of the institute
  - Microcontroller
  - Microprocessor
  - Cad lab
- > Developed department Webpage for MIT website
- ➢ Faculty Advisor T&P cell.
- ➤ Key member for preparation of procedures for ISO-9002
- Convener G.D, Extempore, Paper Presentation for UTKARSH- 07, 06, 05 respectively.

## **VOLUNTEER EXPERIENCE**

Recorded special lectures for institute under "Learning Resources Utilization Centre" (LRCU).

- Delivered a lecture on "Effective Teaching" in a faculty development programme on "Quality Teaching to Budding Engineers" at MIT Moradabad.
- Acted as Jury Member for National Polytechnic Sports Meet at Govt. Polytechnic Moradabad on March 03, 2009.

## SEMINARS DELIVERED

- Oral Presentation Techniques.
- ➢ Introduction to CAD Tools.
- ➢ How to teach so students remember.
- > Introduction to Microprocessors & Microcontrollers.
- Technical Presentation Basics
- Microcontrollers Jazzing up.
- Effective Presentation Tips.
- ➢ Guest lecture on Advanced Microprocessors at IET Sitapur.
- ➢ Ingredients of Good Research Paper.

# **INVITED TALKS**

S. No.	Name of the Event	Event	Year
1.	Technical Committee Sessions Chair at Monad University, Hapur	National Conference	2016
2.	Technical Committee Member at Monad University, Hapur	National Conference	2017

# **HOBBIES/INTERESTS**

- ➢ Reading,
- Playing Chess

# PERSONAL DETAILS

Date of Birth	:	10.07.1977
Gender	:	Male
Category	:	General
Marital Status	:	Married

Place: Moradabad Date: 20.01.2017

(Kshitij Shinghal)