Imran Ullah Khan, Ph.D.
Associate Professor, Department of Electronics & Communication Engineering,
Faculty of Engineering & Information Technology,
Integral University, Lucknow
(8127439699, iukhan@iul.ac.in)
(Google Scholar | Orcid | Scopus | Linkedin | Research Gate | WoS)

## PROFILE

### RESEARCH INTEREST:

- Signal Processing
- Video Processing
- Circuits
- VLSI

### SUMMARY OF RESEARCH ACCOMPLISHMENT:

- 4 SCI Research papers
- 27 Scopus Research Papers
- 8 Patents Published/ Granted
- Reviewed SCI, Scopus and reputed Conferences Papers

### PROFESSIONAL MEMBERSHIP:

- **Senior Member** of Institute of Electrical and Electronics Engineers (IEEE) (Membership No. 93271707).
- **Life time member** of Institute of Engineers (IEI).

## COURSE TAUGHT:

- Digital Electronics
- Analog Integrated Circuits
- Signals & Systems
- Analog Electronics
- Analog Communication
- VLSI Design
- Filter Design

## Administrative/DEPARTMENTAL responsibility

- **Ambassador** IEEE DAY-2021 Region 10 IEEE U.P.Section.
- **University Center Coordinator (Integral University, Lucknow)** Indian Institute of Remote Sensing, Indian Space Research Organization, department of space, government of INDIA.
- **Executive Committee** Member (Ex) **IEEE UP Section**.
- **Ambassador IEEE DAY-2017** INDIA, Pakistan and Bangladesh**.**
- Branch Counselor IEEE Student Chapter, Integral University, Lucknow **(STB17471).**
- Faculty Lead IEEE Integral Univ Lucknow SB SIGHT (#18-009).
- Worked as **Head** Electronics & Communication Engineering Department in Maharana Institute of Professional Studies, Kanpur from 10-01-2012 to 21-07-2013.
- Worked as **Controller of Examination** in Maharana Institute of Professional Studies,Kanpur from 10-01-2012 to 21-07-2013.
- Worked as **Coordinator** (Students Affairs) **i**n Maharana Institute of Professional Studies,Kanpur from 10-01-2012 to 21-07-2013.
- Worked as **Head** Electronics & Communication Engineering Department in Kanpurinstitute of Technology, Kanpur from 02-07-2010 to till 09-01-2012.
- Worked as **Assistant Dean Academics** Kanpur institute of Technology, Kanpur from 09-07-2008 to till 01-07-2010.
- Worked as a Project Coordinator Electronics & Communication Engineering DepttKanpur institute of Technology, Kanpur from 25-02-2008 to 08-07-2008.
- Worked as a Lab Coordinator Electronics & Communication Engineering Deptt Kanpurinstitute of Technology, Kanpur from 01-01-2008 to 08-07-2008.
- Member of Training & Placement Cell in Kanpur institute of Technology, Kanpur from07-08-2006 to 31-12-2007.
- Worked as a **Head** Electronics & Communication Engineering Deptt. in Faculty ofEngineering & Technology Agra College, Agra from January 2005 to August 2006.
- Member of Examination Cell in Faculty of Engineering & Technology Agra College,Agra from July 2003 to August 2006.
- Member of Training & Placement Cell in Faculty of Engineering & Technology AgraCollege, Agra from July 2004 to August 2005.

## STUDENTS SUPERVISION

### Ph.D. COMPLETED

1. Research Scholar: Nupur Mittal,
   Enrolled on: 30.08.2019,
   Enrollment No.- 1901117
   Title: Design & Analysis of Active Monolithic Filter based Circuits for WLAN Applications.
   **Awarded on 21.03.2024.**
2. Research Scholar: Saif Ahmad,
   Enrolled on: 04.11.2020,

Enrollment No.- 2001264

Title: Performance Enhancement of Next Generation Networks using NOMA.

Awarded on 02.09.2024.

Ph.D. Thesis Supervision:

1. Research Scholar: Rani Kiran,
   Enrolled on: 05.11.2020,
   Enrollment No.- 2001261
   Title: Simulation and Characterization of Double Material Cylindrical Surrounding Gate (CSG) MOSFET.
2. Research Scholar: Qazi Saeed Ahmad,
   Enrolled on: 04.11.2020,
   Enrollment No.- 2001263
   Title: An Optimized Waveform Synthesis Scheme to Resolve High PAPR in MIMO OFDM Systems.
3. Research Scholar: Zaeema Qayoom,
   Enrolled on: 23.10.2021,
   Enrollment No.- 2100186
   Title: Removal of Artifacts from ECG Signals using Artificial Intelligence Techniques.
4. Research Scholar: Ankit Jain,
   Enrolled on: 10.11.10.2022,
   Enrollment No.- 2201089
   Title: Development of Low Power IoT based Embedded Application using Entity Authentication Techniques.

M.Tech Supervision:

1. Design and Simulation of Low Power, High gain and High bandwidth CMOS Folded Cascode OTA sing Recycling and $g_m/I_D$ Technique (Sudhakar, Integral University, Lucknow, 2021)
2. FIR Filter Design with Inertia Weight and Compression Factor Approach using Advanced Optimization Techniques (Poonam Kumari, Integral University, Lucknow, 2021).
3. Detection and classification of brain tumor using support vector machine based GUI (Farheen Wahab, Integral University, Lucknow, 2019).
4. Performance of Solar Photovoltaic Installations effect of seasonal variations (Nasim Bano, Integral University, Lucknow, 2019).
5. Design and Characterization of parallel prefix adders using FPGA (Veer Vijay Vikram Singh, Integral University, Lucknow, 2018).
6. Design and Characterization of 16 bit multiplier accumulator based on radix-2 modified booth algorithm (Vijay Dhar Maurya, Integral University, Lucknow, 2018).
7. Image Segmentation of Different Skin Disorders using DWT Denoising and Morphological Operations (Chad. Mohd. Farhan, Integral University, Lucknow, 2018).
8. Design of Current Mode Active Elements for Analog Signal Processing and their Application to Frequency Filters and Impedance Simulators (Saurabh Kumar, Integral University, Lucknow, 2018).
9. Optimised Spectrum Sensing Scheme for Cognitive Radio Network (Rizwan Ahmed, Integral University, Lucknow,2018).
10. Design a Low Complexity Codec using Image Coding (Kirti Saraswat, UPTU, Lucknow,2017).
11. Performance Analysis of H.264/AVC Video Codec (Rahul Nigam, UPTU, Lucknow, 2016).
12. Implementation of improved edge detection technique for fire/flame image processing (Shadab

Dastgeer, Integral University, Lucknow, 2016).

13. Performance Evaluation of H.265 Video Codec and its Advanced Options (Anurag Pandey, UPTU, Lucknow, 2015).
14. Panoramic Image formation using corner detection on image grids (Amarnath Shukla, UPTU, Lucknow, 2015).

## PUBLISHED/GRANT PATENTS

- **Indian Design Patent Design No.:** 417706-001 **Granted**
  **Title of the invention:** IOT BASED BANKING SECURITY MONITORING DEVICE
  **Date of Grant:** 11.07.2024
  **Name of Patent Applicants & Inventors:** 1.Mr. Ankit Jain, **2. Dr. Imran Ullah Khan,** 3.Dr. Varun Shukla, 4.Dr. Shailendra Singh, 5.Dr. Puspraj Singh Chauhan, 6.Dr. Anita Shukla, 7.Dr. Pateshwari Singh, 8.Dr. Dip Prakash Samajdar, 9.Dr. Tanmai Kulshreshtha.
- **Indian Design Patent Design No.:** 420492-001**Granted**
  **Title of the invention:** FINGERPRINT SENSOR BASED ATTENDANCE MONITORING DEVICE.
  **Date of Grant:** 18.06.2024
  **Name of Patent Applicants & Inventors:** 1. Dr. Anita Shukla 2. Mr. Ankit Kumar 3.Mr. Ankit Jain 4.Dr. Shailendra Singh 5.Dr. Puspraj Singh Chauhan **6.Dr. Imran Ullah Khan**
- **Indian Design Patent Design No.:** 420492-001**Granted**
  **Title of the invention:** PATIENT RESPIRATORY SUPPORT DEVICE
  **Date of Grant:**25.06.2024
  **Name of Patent Applicants & Inventors:** 1.Mr. Ankit Jain 2. Dr. Man Mohan Shukla **3.Dr.Imran Ullah Khan** 4.Dr. Shailendra Singh 5.Dr. Anita Shukla 6.Dr. Puspraj Singh Chauhan
- **Indian Patent Published Application Number:** 202411047250
  **Title of the invention:** LOW POWER IOT BASED THREE FACTOR PROTECTED EMBEDDED ENTRANCE MONITORING SYSTEM.
  **Date of Published:** 05.07.2024
  **Name of Patent Applicants & Inventors:** 1 . Shailendra Singh, 2 . Mr. Ankit Jain, **3 . Dr. Imran Ullah Khan**, 4 . Dr. Varun Shukla
- **Indian Design Patent Design No.:** 370349-001 **Granted**
  **Title of the invention:** MULTIUTILITY SMART PLUG
  **Date of Grant:** 03.09.2022
  **Name of Patent Applicants & Inventors:** Dr. Shashi Kant, **Dr. Imran Ullah Khan,** Dr. Bhuvanesh Kumar Sharma, Dr. Ashish Kumar Pandey.
- **Germany Utility Patent Application No.:** 20 2022 106 913.1. **Granted**
  **Title of the invention:** ELECTRONIC COMMERCE SUPPLY CHAIN MANAGEMENT SYSTEM FOR DECORATIVE MATERIALS USING MACHINE LEARNING
  **Date of Grant:** 09.01.2023
  **Name of Patent Applicants & Inventors:** K. Kumar, S. Kant, **Imran Ullah Khan**, U.Kumar, N. Mittal , J.B.Khan, B.K.Pandey, R.Singh
- **Germany Utility Patent Application No. :** 20 2022 103 801.5. **Granted**

**Title of the invention:** Smart Financial Management System for E-Commerce Sites to Analysis Price and Profit using Machine Learning Approach
**Date of Grant:** 02.08.2022
**Name of Patent Applicants & Inventors:** S. K. Gupta, **Imran Ullah Khan,** B. Haralayya, C. K. Dixit, D. A. Karras, A.T. Khan, F. Husain, A. Alemran, A. Pathak, T. Anhran.

- **Indian Patent Published Application Number:**202111037888
  **Title of the invention:** "Very Low-Cost High-Performance VLSI Advanced Architecture for Montegomry Modular Multiplication" .
  **Date of** Published on: 10.09.2021.
  **Name of Patent Applicants & Inventors:** D. Balodi, D. Sharma, **Imran Ullah Khan**

## PUBLISHED/ACCEPTED SCI/SCOPUS RESEARCH PAPERS

- **Imran Ullah Khan**; D. Balodi; N. K. Misra "Low Power LC- Quadrature VCO with Superior Phase Noise Performance in 0.13 µm RF-CMOS Process for Modern WLAN Application" Circuits, Systems & Signal Processing (CSSP)-Springre Nature volume 41, pages: 2522–2540 (January 2022). DOI: https://doi.org/10.1007/s00034-021-01921-4 [Indexing: SCI, ESCI, SCOPUS & UGC-CARE etc.]
- Nupur Mittal, **Imran Ullah Khan**, Zohaib Hasan Khan, "Design a Low-Power Low-Pass nano-dimension based Filter with High Linearity for Next-Generation WSN" ID- IJND-2024-0022, Accepted in International Journal of Nano Dimension on 22.06.2024 [ESCI].
- Nupur Mittal, **Imran Ullah Khan**, Neeraj Kumar Misra, "A low-power, wideband-tunable, nano-dimension based CMOS LC ladder filter designed using GmC", International Journal of Nano Dimension, vol.- 14, issue- 3, pp.-238 to 256, June 2023, doi: 10.22034/IJND.2023.1986547.2222. [ESCI]
- Saif Ahmad, **Imran Ullah Khan**, Mohd Javed Khan, "Performance Analysis of NOMA based UAV-Assisted Cooperative Relaying System with Direct Link over Rician Fading Channels" , Engineering Research Express, pp-1 to 20, October, 2023. Doi:10.1088/2631-8695/ad035f, (ESCI).
- Saif Ahmad, **Imran Ullah Khan**, Mohd Javed Khan, "Performance Analysis of NOMA based UAV-Assisted Cooperative Relaying System with Direct Link over Rician Fading Channels" , Engineering Research Express, pp-1 to 20, October, 2023. Doi:10.1088/2631-8695/ad035f, (ESCI)
- Qazi Saeed Ahmad, **Imran Ullah Khan**, "Improved pre coding scheme for PAPR minimization in MIMO OFDM Communication System, European Chemical Bulletin, vol.- 12, issue-10, pp.-3127 to 3134, August 2023 doi: 10.48047/ecb/2023.12.10.216. [Scopus]
- Mittal, N., **Imran Ullah Khan**, & Khan, Z. H. (2023). A Modern WSN Low Pass Filter Design for High Linearity and Low Power Consumption. International Journal of Computing and Digital Systems, 14(1), 1-xx. doi : 10.12785/ijcds/XXXXXX.
- **Imran Ullah Khan**, M. A. Ansari, S. Hasan Saeed and Kakul Khan "Evaluation and Analysis of Rate Control Methods for H.264/AVC and MPEG-4 Video Codec" International Journal of Electrical and Computer Engineering (IJECE) Vol.8 , No.2, April 2018 , pp. 1286~1294 ISSN: 2088-8708, DOI: 10.11591/ijecev8i2. [Indexing: SCOPUS, Indian Sciences Abstract etc.]

- M.A. Ansari & **Imran Ullah Khan**, "Analysis and Evaluation of Proposed Algorithm for Advanced Options of H.263 and H.264 Video Codec", International Journal of Applied Engineering Research, Volume 10, Number 11 (2015) pp. 28711-28731 Research India Publications [Indexing: SCOPUS].

## PAPER PUBLISHED IN INTERNATIONAL CONFERENCES

- Kiran, R., **Imran Ullah Khan.**, & Purwar, V. (2023). Temperature dependent performance analysis of high-K dielectric pocket-double cylindrical surrounding gate (HKG-DP-DCSG) & high K-dual material-double cylindrical surrounding gate (HKG-DM-DCSG) MOSFETs. Materials Today: Proceedings. doi : 10.1016/j.matpr.2023.03.371.
- Mittal, N., **Imran Ullah Khan**, & Charan, P. (2023). Design and performance analysis of low power fully integrated tunable bandpass filter. Materials Today: Proceedings. doi : 10.1016/j.matpr.2023.03.369.
- A. Kumar, **Imran Ullah Khan,** "Performance Characterization of Double Material Gate all around Nano-wire MOSFET" Presented and Published in "Springer International Conference on Trends in Electronics and Health Informatics (TEHI-2021)", held on 16-17, December, 2021.
- R. Kiran**, Imran Ullah Khan,** "Comparative Study of Different Material Tri Gate MOSFET with Dielectric Material" Presented and Published in "Springer International Conference on Trends in Electronics and Health Informatics (TEHI-2021)", held on 16-17, December, 2021.
- K. K. Tripathi, Mohd. S. Kidwai, **Imran Ullah Khan,** "Performance Analysis of Low Pass FIR Filter Design using Dynamic and Adjustable Particle Swarm Optimization Techniques" Presented and Published in "2021 10$^{th}$ IEEE International Conference on System Modeling & Advancement in Research Trends (SMART)", held on 10-11 December, 2021.
- Y. Siddiqui, Nupur Mittal, **Imran Ullah Khan,** "Performance Analysis and Characterization of Double Gate and Gate All Around MOSFET" Presented and Published in "2021 10$^{th}$ IEEE International Conference on System Modeling & Advancement in Research Trends (SMART)", held on 10-11 December, 2021.
- A. S. Ansari, Md. A. Ansari, **Imran Ullah Khan,** "Performance Evaluation of Operational Amplifier with High PSRR in 0.18 µm CMOS Technology" Presented and Published in "2021 10$^{th}$ IEEE International Conference on System Modeling & Advancement in Research Trends (SMART)", held on 10-11 December, 2021.
- N. Mittal, **Imran Ullah Khan,** S. Shukla, "Comparative Analysis of Reconfigurable Low Pass Filter using Biquad Active, Ladder Gm-C and Multiple Loop Feedback Techniques" Presented and Published in "2020 9$^{th}$ International Conference System Modeling and Advancement in Research Trends (SMART)", held on 04-05 December 2020.
- A. Kumar, P. Kumari, **Imran Ullah Khan,** "High Gain Miller Compensated OpAmp with High Supply Rejection in 180 nm CMOS Technology" Presented and Published in "2020 9$^{th}$ International Conference System Modeling and Advancement in Research Trends (SMART)", held on 04-05 December 2020.
- **Imran Ullah Khan,** N. Mittal, H. Yaquin & S. H. Saeed "Context Adaptive Binary Arithmetic Coding Algorithm for H.264/AVC Video Code and Overview of H.265" is presented and published to International Conference on Electrical, Electronics, Computers, Communication, Mechanical and

Computing (EECCMC) at Priyadarshini Engineering College, Chettiyappanur, Vaniyambadi - 635751, Vellore District, Tamil Nadu, India.

- **Imran Ullah Khan**, M. A. Ansari "Performance Analysis of H.264 Video Decoder: Algorithm and Applications" is published in IEEE Xplore digital Library, Pages: 1- 6, DOI: 10.1109/EnergyEconomics.2015.7235096.
- M. A. Ansari **& Imran Ullah Khan**, "Performance Analysis and Evaluation of Proposed Algorithm for Advance Options of H.263 and H.264 Video Codec" is published in IEEE Xplore digital Library, Year: 2015, Pages: 371 - 376, DOI: 10.1109/RDCAPE.2015.7281427.
- **Imran Ullah Khan**, M. A. Ansari "High Efficiency Video Codec (H.265/HEVC) Overview and Analysis of Deblocking Filter" is presented and published to International Conference on Advanced Trends in Engineering, Management and Science (ICATEMS-2017), ISBN 978-81-933746-7-2 on May 7, 2017 by (IFUNA) Indian Federation of United Nations Associations, Qutub Institutional Area, New Delhi (India).
- **Imran Ullah Khan**, M. A. Ansari "Overview of High Efficiency Video Encoder and Comparative Analysis of H.265 & H.264/AVC Video Encoders" is presented and published to "First IEEE Uttar Pradesh Conference-International Conference on Computing Communication and Automation (ICCCA2017), ISBN: 978 - 1 -5090 - 6471 - 7 from May 5-6, 2017. IEEE Conference record number: # 41372 at Department of Electrical and Electronics Engineering Galgotia College of Engineeringand Technology, Greater Noida Uttar Pradesh, India.
- **Imran Ullah Khan**, M. A. Ansari "Performance Analysis of H.264 Video Decoder: Algorithm and Applications" is presented and published to "First IEEE Uttar Pradesh Conference-International Conference on Energy Economics and Environment, 1st UPCON-ICEEE 2015" from 27$^{th}$ -28$^{th}$ March, 2015. IEEE Conference record number:34456 at Department of Electrical and Electronics Engineering Galgotia College of Engineering and Technology, Greater Noida Uttar Pradesh, India.
- M. A. Ansari, **Imran Ullah Khan**, "Performance Analysis and Evaluation of Proposed Algorithm for Advance Options of H.263 and H.264 Video Codec" is presented and published to "2015 International Conference on Recent Developments in Control, Automation and Power Engineering (RDCAPE-2015)" from 12$^{th}$ -13$^{th}$ March, 2015. Technically sponsored by the IEEE Delhi Section. IEEE Conference record number: 34456 at Amity University Noida, Uttar Pradesh, India.
- **Imran Ullah Khan**, M. A. Ansari and N. Mittal "Performance Evaluation of Deblocking Filter for H.263 Video Codec and Proposed Algorithm for Deblocking Filter and Entropy Coding for MPEG-4 Video Codec"is presented and published in "IEEE International Conference on Computational Intelligence & Communication 7 Technology (CICT- 2015)" from 13th -14th February, 2015. Technically Sponsored by the IEEE UP Section at ABES Engineering College Ghaziabad, India.
- **Imran Ullah Khan**, M. A. Ansari "Error Concealment of Data Partitioning for H.264/AVC" is presented and Published in "International Conference on Recent Trends & Issues in Engineering and Technology (ICRTIET-2014)" August 30 & 31, 2014 Technically sponsored by IJSRET,IJETE and IJAERT organized by Divya Jyoti College of Engineering & Technology Modinagar, Ghaziabad (U.P.).
- **Imran Ullah Khan**, M. A. Ansari "Overview of TI DSP Processor and Performance Analysis of H.264 Video Decoder on TI DSP processor" is presented and Published in "National Student's

Conference on Advances in Electrical and Information Communication Technology (AEICT-2014)" April 12-13, 2014 at PSIT/ PSITcoe, Kanpur Technically sponsored by The Institution of Electronics & TelecommunicationEngineers (IETE) Kanpur Centre.

- **Imran Ullah Khan** "Analysis and comparison of H.263 and H.264 Video Codec" is Presented, and Published in 4th National Conference and ISTE state chapter annual convention on wireless communication & VLSI design (NCWCVD-2011) May 29, 2011 organized by Dept. of Electronics & Communication Engg. Gwalior EngineeringCollege.
- **Imran Ullah Khan** "Performance Evaluation of an H.263 Video Coder" is Presented and Published in National Conference "Innovations in Electronics & InformationTechnology" organized by VIT, Mumbai October 5-6 2009.
- Pragati Tripathi, M.A.Ansari, **Imran Ullah Khan** and Mukul Singh "Analysis of Current Density, Absorption Coefficient for Increasing the Efficiency of Solar Cell by using GaAs as Substrate" is presented and published to IEEE International Conference Computational and Characterization Techniques in Engineering & Sciences, CCTES- 18 at Integral University, Lucknow. Conference ID: 44023

## PUBLISHED NON-SCI-SCOPUS BUT PEER REVIEWED RESEARCH PAPERS

- Sudhakar, **Imran Ullah Khan** and Mittal N., "Design and Simulation of Low Power, High Gain and High Bandwidth CMOS Folded Cascode OTA Using Recycling and gm/ID Technique" published in International Research Journal of Computer Science (IRJCS), Volume 8, Issue 03, March 2021.DOI: https://doi.org/10.26562/irjcs.2021.v080.
- F. wahab and **Imran Ullah Khan**"Brain Tumor Identification Techniques using MRI: A Review" Journal of Applied Science and Computations, Vol.-5 Issue-XI, November- 2018, UGC Journal No.-41238, PP: 564-571,DOI:16.10089.JASC.2018.V5I11.453459.149882.
- M.J.Khan, **Imran Ullah Khan** and S.H. Saeed "A Review on Challenges and Possible Solution of Fifth Generation Network (5G), Journal of Applied Science and Computations, Vol.-5 Issue-XI, November-2018, UGC Journal No.-41238, Page No: 572-578, DOI:16.10089.JASC.2018.V5I11.453459.149883
- R. Ahmad and **Imran Ullah Khan** "Optimization of Intelligent Spectrum Sensing Techniques for Cognitive Radio Networks" International Journal of Engineering and Technical Research (IJETR) ISSN: 2321-0869 (O) 2454-4698 (P) Volume-8, Issue-3, March 2018 pp:1-6.
- S.Kumar and **Imran Ullah Khan** "Voltage Mode Universal Filter Using Current Converyor**"** International Journal of Advance Research and Development Vol. 2, No.7, July 2017 , pp. 15~20.
- **Imran Ullah Khan**, Asheesh Shah, M. A. Ansari, S. Hasan Saeed and Kakul Khan "Rate Control Methods evaluation & analysis for H.263 and MPEG-4 Video Codec" IndianJournal of Science and Technology Vol. 10(13), pp. 1-7, April 2017 DOI: 10.17485/ijst/2017/v10i13/101882,. [Indexing: Web of Science (Zoological record)].
- **Imran Ullah Khan**, M.A. Ansari "Evaluation of Deblocking Filter for H.263 Video Codec & Proposed Algorithm for Entropy Coding for MPEG-4 Video Codec" International Journal of Control Theory and Applications Vol.8 Issue4, pp. 1611-1620 (2015),Serials Publications [Indexing : SCOPUS, Indian Sciences Abstract etc.]
- **Imran Ullah Khan**, M.A. Ansari "Data Partitioning and MDC for the SPECK Coder for real time

applications over wireless channel" Indian Journal of Industrial and Applied Mathematics", Volume 6 , Issue 1,Jan-June (2015) pp. 57 - 72.

- **Imran Ullah Khan**, M.A. Ansari," Overview and Implementation of Intrapredictions for H.264/AVC Video Codec, International Journal of Electronics and Communication Engineering (IJECE) Vol. 3, Issue 4, July 2014, 177-186. [Indexing: DOAJ, Thomson Reuters' Researcherid etc.]
- **Imran Ullah Khan**, M.A. Ansari "Analysis and applications of H.264 Video Coding Standard" has been published in International Journal of Advanced Technology & Engineering Research (IJATER), Volume 2, Issue 2, March 2012, pp-110-114.
- Rahul Nigam, **Imran Ullah Khan** "Performance Analysis of H.264/AVC with In- Loop Deblocking Filter" International Journal of Electronics Communication and Computer Engineering (IJECCE) ISSN (Online Journal): 2249 - 071X, ISSN (Print): 2278 –4209, Paper ID: IJECCE-2902.
- **Imran Ullah Khan** "Error Concealment of Data Partitioning for H.264/AVC" is presented and Published in "International Conference on Recent Trends & Issues in Engineering and Technology (ICRTIET-2014)" August 30 & 31,2014and also published in International Journal of Emerging Technologies & Engineering (IJETE) ISSN : 2348 -8050, vol.-2,special issue-1,pp-20-25.
- **Imran Ullah Khan** "Overview and Implementation of Intrpredictions for H.264/AVC video codec" IASET: International Journal of Electronics and Communication Engineering (IJECE) in Vol-3, Issue-4, Jul-2014 Edition ISSN (Print):2278-9901; ISSN (Online):2278-991X; Impact Factor (JCC):3.2029.
- **Imran Ullah Khan** "Comparative study of HUFFMAN CODING,SBAC and CABAC use in various Video Coding Standards and their Algorithm" is Published in International Journal of Scientific and Engineering Research (IJSER) in Volume 4, Issue11, November 2013 Edition (ISSN 2229-5518).
- **Imran Ullah Khan** "Analysis and applications of H.264 video codec" IJATER (International Journal of Advanced Technology & Engineering Research (Vol 2, Issue 2, March 2012),(ISSN 2250–3536 (Online).
- **Imran Ullah Khan** "Performance Analysis of H.264 Video Coding Standard and H.263 Video Coding Standard" International Journal VSRD Technical & Non-Technical Journal VSRD-TNTJ, Vol. 2 (1), 2011, 5-5;pp. 8-14.
- **Imran Ullah Khan** "Performance Enhancement of an H.263 video codec" National Journal of Globe Sci-Tech volume-2(Number-2) April-June 2010; pp.-84-88.
- **Imran Ullah Khan** "Performance Comparison of an MPEG-4 video codec" National Journal of Globe Sci-Tech volume-2(Number-2) April-June 2010; pp.-80-83.
- **Imran Ullah Khan** "Performance Comparison of H.264 video coding standard with H.263 video coding standard" National Journal of Globe Sci-Tech volume-2(Number-1)January-March 2010; pp.-1-5.

## BOOK EDITED/ AUTHORED

- Reviewed "Electronic Communication Systems" by George Kennedy and Bernard Davis with Tata McGraw Hill Education Private Limited, New Delhi.
- Published a book Title "Textbook of Signals & System" with Acme Learning Pvt. Ltd. New Delhi.

- Published a book Title “Basic System Analysis” with I. K. International Publishing House Pvt. Ltd. New Delhi.
- Authored a Book title “Emerging Trends in Non-Conventional Energy Resources” published by Aargon Press, Lucknow. ISBN:9788195188451.

## BOOK CHAPTERS

- Book Chapter titled (Feb, 2024). “Application of Internet of Things (IoT) Technologies for Agriculture”, Ch.-9, 1-19, ISBN: 9781003434269, Taylor & Francis CRC Press. doi : https://doi.org/10.1201/9781003434269.
- Book Chapter titled (Feb, 2024). “Healthcare Internet of Things (HIoT) Technologies and Implementation”, Ch.-17, pp. 275-291 ISBN: 9781032686745, Book Title: AI and IoT Technology and Applications for Smart Healthcare Systems, Taylor & Francis CRC Press. doi : https://doi.org/10.1201/9781032686745.
- Book Chapter titled (2023). “Applications of VLSI Design in Artificial Intelligence and Machine Learning. Machine Learning for VLSI Chip Design”, 1-17, Wiley Publication. doi : 10.1002/9781119910497.ch1.
- Book Chapter titled (2023). “Applications of VLSI Design in Artificial Intelligence and Machine Learning. Machine Learning for VLSI Chip Design”, 1-17, Wiley Publication. doi : 10.1002/9781119910497.ch1.

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