

Amit M. Joshi



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SUMMARY:

Ph.D in Electronics and Communication Department from National Institute of Technology, Surat, India and having more than 18 years of teaching and research experience. Recent interest includes Biomedical Circuit and Systems, Smart healthcare devices, Embedded System design and VLSI signal processing applications.

EDUCATIONS:

Ph.D. 2015 Electronics and Communication Engineering, National Institute of Technology, Surat, India
M.Tech 2009 Electronics and Communication Engineering, National Institute of Technology, Surat, India
B.E. 2005 Electronics Engineering, SCET, Veer Narmad South Gujarat University ,Gujarat. India

PROFESSIONAL EXPERIENCE

Malaviya National Institute of Technology Jaipur | Rajasthan, India

Assistant Professor | July 2013 – Current

Course Instructor | VLSI Signal Processing Architecture (UG & PG), Digital System Design & FPGA (UG & PG), Switching Theory & Finite Automata (UG), CAD Algorithms for Synthesis of Digital Systems (UG & PG), Formal Verification of Digital Hardware & Embedded Software (UG & PG), Mathematical Methods & Techniques for ECE technologists-II (PG)

Sardar Vallabhbhai National Institute of Technology Surat |Gujarat , India

Lecturer on Contract | July 2010 – June 2013

Course Instructor | Digital VLSI Design (PG) , VLSI System Design (UG), Digital Logic Design (UG), Mechatronics (UG), Linear Electronics (UG)

Sardar Vallabhbhai National Institute of Technology Surat |Gujarat , India

Research Assistant | May 2009 – June 2010

Job Profile | Worked under the project of Special Manpower Development Program (Phase II) which is related to develop manpower in VLSI and Embedded System. Also worked on the FFT chip design for Zigbee 802.15. The chip was fabricated through IMEC Belgium through the support of Ministry of Electronics & Information Technology (Meity), Government of India.

e-Infochips Ahmedabad |Gujarat , India

ASIC Engineer | February 2008 – April 2008

Job Profile | worked for verifying D0-254 compliance product. I have worked on development of Verification Environment for functional verification of basic module like CIO (configurable Input/output block), Bus controller and SPI block.

Sardar Vallabhbhai National Institute of Technology Surat |Gujarat , India

VLSI Lab Engineer | August 2006 – January 2008

Job Profile | Worked for the development of the VLSI Laboratory under Special Manpower Development Program (Phase II). The role is to design the experiments for VLSI Lab and conduct for UG & PG level students. The installation of all EDA tools and hands of experience for FPGA boards are done.

Sardar Vallabhbhai National Institute of Technology Surat |Gujarat , India

Teaching Assistant | August 2005 – June 2006

Course Instructor | Microprocessor (UG) , Audio & Video Engineering (UG), Digital Logic Design (UG)

THESIS & DISSERTATION

Ph.D. **Amit M. Joshi**, (2015) "VLSI Implementation of Video Watermarking based on H.264 Coding standard,". Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat Advisor: Prof. Rajendra Patrikar, Dr. J.N. Sarviaya, Dr. U.D. Dalal.
M.Tech **Amit M. Joshi**, (2009) "FPGA Implementation of Digital watermarking in Digital Camera," Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat Advisor: Dr. Anand D. Darji.

PATENT FILED

[1] Shailendra Tripathi, M. Samar Ansari, **Amit M. Joshi**, "Ultra Low Transconductance Amplifier Using Carbon NanoTube Field Effect Transistor (For biomedical applications)," No. 201811024700, Date of Filing: 03-07-2018, Intellectual Property India. (Patent is Granted on 03 January, 2023)
[2] **Amit M. Joshi**, Prateek Jain, and Saraju P. Mohanty, "iGLU: A Device for Accurate Noninvasive Blood and Serum Glucose-Level Monitoring and Insulin Delivery for its Control in Smart Healthcare", No.202011027041 A
Date of Filing: 25/06/2020

PROJECTS (ONGOING/COMPLETED)

[1] Project Title: Low power IP Core Hardware security (fingerprinting) module for IoT applications, Role : PI, Funding Agency : MeiTY, Amount 79.75 L, 2016-2021.
[2] Project Title: iGLU : Intelligent Glucose Measurement Device, Role: PI, Agency : IITI Drishti Foundation, Amount 10.5 L, 2023-2024
[3] Project Title: Onboard spectral preprocessing for multispectral image compression using FPGA, Role: Co-PI, Funding Agency: ISRO, Amount: 19 L, 2023-2025
[4] Project Title: iFebSz : Intelligent Febrile Seizure Monitoring Device for Children, Role : Founder & Director of Start Up "Svararogyam Medical Device Pvt. Ltd.", Funding Agency : DST, Amount: 10 L, 2022 – 2023.
[5] Project Title : iGLU Non-Invasive Glucose Measurement Device, Role : Founder & Director of Start Up "Svararogyam Medical Device Pvt. Ltd.", Funding Agency : MSME, Amount: 15 L, 2022-2024.
[6] Project Title: Insulin Management System for Type 1 Diabetes Peopl, Role : Founder & Director of Start Up "Svararogyam Medical Device Pvt. Ltd.", Funding Agency : MeiTY, Amount: 25 L, 2022-2023.
[7] GIAN Course : Internet of Things (IoT) solutions for Real World Problems, Foreign Expert: Prof. Sandip Ray, University of South Florida, Role : Coordinator, Funding Agency : GIAN IIT Kharagpur, Amount : 6.5 L. 6 June- 11 June, 2022

REFEREED JOURNAL PUBLICATIONS [SCI/SCOPUS]

[1]Sharma, Geetanjali, Amit M. Joshi, Deepshikha Yadav and Saraju P. Mohanty, "A Smart Healthcare Framework for Accurate Detection of Schizophrenia using multi-channel EEG", IEEE Transactions on Instrumentation and Measurement (Accepted)
[2] Richa Sharma, Amit M Joshi, Chitrakant Sahu, Satyasai J. Nanda, "Temporal and Consumer Driven Cluster Analysis for Identification of FDI Attack in Smart Grid" International Journal of Numerical Modelling
[3] Giriraj Sharma, Amit M. Joshi, Saraju P. Mohanty "sTrade: Blockchain based secure energy trading using vehicle-to-grid mutual authentication in smart transportation", Sustainable Energy Technologies and Assessments, Elsevier (Q1 Journal : IF 7.6)
[4] Sharma, Geetanjali, Amit M. Joshi, Richa Gupta, and Linga Reddy Cenkeramaddi. "DepCap: A Smart Healthcare Framework for EEG based Depression Detection using Time-Frequency Response and Deep Neural Network." IEEE Access (2023). (Q1 Journal: IF 3.456)
[5] Sushil kumar Jain, Amit M. Joshi, Deepak Bharti "Effect of Temperature on Performance Characteristics with Varying Defect States Parameters in TIPS-pentacene Based OTFTs", Silicon (springer) (Accepted)
[6]Pancholi, Sidharth, Amit M. Joshi, and Deepak Joshi. "DLPR: Deep learning-based enhanced pattern recognition framework for improved myoelectric prosthesis control." IEEE Transactions on Medical Robotics and Bionics 4, no. 4 (2022): 991-999.
[7] Sharma, Richa, Amit M. Joshi, Chitrakant Sahu, and Satyasai Jagannath Nanda. "Detection of false data injection in smart grid using PCA based unsupervised learning." Electrical Engineering Springer (2023): 1-14.
[8] Ahmad, Riyaz, Narendra Choudhary, Sujeet Kumar Gupta, Amit Mahesh Joshi, and Dharmendar Boolchandani. "Novel tunable current feedback instrumentation amplifier based on BBFC OP-AMP for biomedical applications with low power and high CMRR." Integration 90 (2023): 214-223.

- [9] Jain, Sushil Kumar, Amit Mahesh Joshi, and Linga Reddy Cenkeramaddi. "Dielectric Modulated Bilayer Electrode Top Contact OTFT for Label Free Biosensing." *IEEE Access* (2023).
- [10] Sharma, Geetanjali, Amit M. Joshi, and Emmanuel S. Pilli. "DepML: An efficient machine learning-based MDD detection system in IoMT framework." *SN Computer Science* 3, no. 5 (2022): 394.
- [11] Sharma, Geetanjali, and Amit M. Joshi. "SzHNN: A Novel and Scalable Deep Convolution Hybrid Neural Network Framework for Schizophrenia Detection Using Multichannel EEG." *IEEE Transactions on Instrumentation and Measurement* 71 (2022): 1-9.
- [12] Jain, Sushil Kumar, and Amit Mahesh Joshi. "Performance Investigation of Electrical Parameters of OTFT for Different Dielectric Materials." *Annals of the Romanian Society for Cell Biology* 26, no. 01 (2022): 3074-3082.
- [13] Ahmad, Riyaz, Amit M. Joshi, Dharmendar Boolchandani, and Tarun Varma. "Novel Programmable Readout Amplifier and Potentiostat for Glucose Sensing Applications." *SN Computer Science* 4, no. 2 (2022): 100.
- [14] Pathak, Vikas, Satyasai Jagannath Nanda, Amit Mahesh Joshi, and Sitanshu Sekhar Sahu. "Identification of characteristics frequency and hot-spots in protein sequence of COVID-19 disease." *Biomedical Signal Processing and Control* (2022): 103909.
- [15] Tripathi, S. K., and Amit M. Joshi. "Sub-10 pA/V Transconductance Amplifier Using 0.9 V, 32 nm Carbon Nanotube Field Effect Transistor." *Journal of Circuits, Systems and Computers* (2022): 2220002.
- [16] Khairnar, Avadhoot, Bhavuk Chauhan, Geetanjali Sharma, and Amit M. Joshi. "High-Performance 32-Bit Parallel Hybrid Adder Design Using RNS and Hybrid PTL/CMOS Logic." *Journal of Circuits, Systems and Computers* (2022): 2250200.
- [17] Joshi, Amit M., Prateek Jain, and Saraju P. Mohanty. "iGLU 3.0: A Secure Noninvasive Glucometer and Automatic Insulin Delivery System in IoMT." *IEEE Transactions on Consumer Electronics* (2022).
- [18] Sharma, Vipul, and Amit M. Joshi. "VLSI Implementation of Reliable and Secure Face Recognition System." *Wireless Personal Communications* 122, no. 4 (2022): 3485-3497.
- [19] Pathak, Vikas, Satyasai Jagannath Nanda, Amit Mahesh Joshi, and Sitanshu Sekhar Sahu. "FPGA implementation of high-speed tunable IIR band pass notch filter for identification of hot-spots in protein." *International Journal of Circuit Theory and Applications* 49, no. 11 (2021): 3748-3765.
- [20] Riyaz ahmed, Amit M. Joshi, D. Boolchandani, "A novel instrumentation amplifier with high tunable gain and CMRR for biomedical applications", *Turkish Journal of Electrical Engineering & Computer Science*, 2021 (Accepted)
- [21] Joshi, Amit M., Prateek Jain, and Saraju P. Mohanty. "Everything You Wanted to Know About Continuous Glucose Monitoring." *IEEE Consumer Electronics Magazine* (2021). (Accepted) (Q1 Journal, IF: 4.1)
- [22] V. Pathak, S. J. Nanda, A. M. Joshi and S. S. Sahu, "FPGA Implementation of High Speed Tunable IIR Band Pass Notch Filter for Identification of Hot-spots in Protein", *International Journal of Circuit Theory and Applications*, 2021. (Accepted) (Q3 Journal, IF: 1.6)
- [23] Harshit Jain, Mukul Kumar, Amit M. Joshi, "Intelligent Energy Cyber Physical Systems (iECPs) for Reliable Smart Grid against Energy Theft and False Data Injection", *Electrical Engineering*, Springer, 2021, (Accepted) (Q2 Journal, IF: 2.2)
- [24] Sidharth Pancholi, Amit M. Joshi, "Intelligent Upper-Limb Prosthetic Control (iULP) Prosthetic Control with Novel Feature Extraction Method for Pattern Recognition using EMG" *Journal of Mechanics in Medicine and Biology* Vol. 21, No. 3 (2021) 2150043 (19 pages), World Scientific Publishing Company, DOI: 10.1142/S0219519421500433. (Q4 Journal IF: 0.98)
- [25] Manjunath Tadalagdi, Amit M. Joshi, "AutoDep: automatic depression detection using facial expressions based on linear binary pattern descriptor", *Medical & Biological Engineering & Computing*, Springer, Accepted (April, 2021) (Q2 Journal IF: 3.05)
- [26] Geetanjali Sharma, Abhishek Parashar, Amit M. Joshi, "DepHNN: A novel hybrid neural network for electroencephalogram (EEG)-based screening of depression", *Biomedical Signal Processing and Control*, Vol. 66, April 2021. Doi: 10.1016/j.bspc.2020.102393 (Q2 Journal IF: 4.09)
- [27] **A. M. Joshi**, U. P. Shukla and S. P. Mohanty, "Smart Healthcare for Diabetes during COVID-19," in *IEEE Consumer Electronics Magazine*, doi: 10.1109/MCE.2020.3018775. (Q1 Journal, IF: 4.1)
- [28] **A. M. Joshi**, P. Jain, S. P. Mohanty and N. Agrawal, "iGLU 2.0: A New Wearable for Accurate Non-Invasive Continuous Serum Glucose Measurement in IoMT Framework," in *IEEE Transactions on Consumer Electronics*, vol. 66, no. 4, pp. 327-335, Nov. 2020 (Q2 Journal, IF: 2.8)
- [29] S. Pancholi and A. M. Joshi, "Advanced Energy Kernel-Based Feature Extraction Scheme for Improved EMG-PR-Based Prosthesis Control Against Force Variation," in *IEEE Transactions on Cybernetics*, doi: 10.1109/TCYB.2020.3016595. (Q1 Journal, IF: 11.1)
- [30] Sushil Jain, **Amit M Joshi**, Deepak Bharati, "Performance Investigation of Organic Thin Film Transistor on varying Thickness of Semiconductor Material: An experimentally Verified Simulation Study", *Semiconductors*, vol. 54, Issue 11(November), 2020. (Q4 Journal, IF: 0.64)
- [31] V. Pathak, S. J. Nanda, **A. M. Joshi** and S. S. Sahu, "VLSI implementation of anti-notch lattice structure for

- identification of exon regions in Eukaryotic genes," in IET Computers & Digital Techniques, vol. 14, no. 5, pp. 217-229, 9 2020, doi: 10.1049/iet-cdt.2019.0086. (Q3 Journal, IF: 0.8)
- [32] Pathak, V, Jagannath Nanda, S, **Mahesh Joshi, A**, Sekhar Sahu, S. "Hardware implementation of infinite impulse response anti-notch filter for exon region identification in eukaryotic genes," International Journal of Circuit Theory and Applications Appl. 2020; 1– 15. <https://doi.org/10.1002/cta.2838>. (Q3 Journal, IF: 1.6)
- [33] A. K. Tripathy, A. G. Mohapatra, S. P. Mohanty, E. Kougiianos, **A. M. Joshi** and G. Das, "EasyBand: A Wearable for Safety-Aware Mobility During Pandemic Outbreak," in IEEE Consumer Electronics Magazine, vol. 9, no. 5, pp. 57-61, 1 Sept. 2020, doi: 10.1109/MCE.2020.2992034 (Q1 Journal, IF: 4.1)
- [34] **Joshi, Amit M.**, and Alongbar Bramha. "VLSI Architecture of Block Matching Algorithms for Motion Estimation in High Efficiency Video Coding." Wireless Personal Communications (2020): 1-16 (Q4 Journal, IF: 1.1)
- [35] S. Pancholi and **A. M. Joshi**, "Improved Classification Scheme Using Fused Wavelet Packet Transform Based Features for Intelligent Myoelectric Prostheses," in IEEE Transactions on Industrial Electronics, vol. 67, no. 10, pp. 8517-8525, Oct. 2020, doi: 10.1109/TIE.2019.2946536. (Q1 Journal, IF: 7.5)
- [36] P. Jain, **A. M. Joshi**, and S. P. Mohanty, "iGLU: An Intelligent Device for Accurate Non-Invasive Blood Glucose Level Monitoring in Smart Healthcare," IEEE Consumer Electronics Magazine 9, no. 1 (2019): 35-42. ,January 2020, DOI: 10.1109/MCE.2019.294085 (Q1 Journal, IF: 4.1)
- [37] Prateek Jain, M.Ravi Kumar, **Amit Joshi**, " A precise non-invasive blood glucose measurement system using NIR spectroscopy and Huber regression model", Optical and Quantum Electronics 51, no. 2 (2019): 51.[SCI] (Q3 Journal, IF: 1.8)
- [38] Sidharth Pancholi and **Amit M. Joshi**, " Electromyography-Based Hand Gesture Recognition System for Upper Limb Amputees", IEEE Sensors Letters 3, no. 3 (2019): 1-4. (Q3 Journal, IF: 3.1)
- [39] Sidharth Pancholi and **Amit M. Joshi**, " Time Derivative Moments Based Feature Extraction Approach for Recognition of Upper Limb Motions Using EMG", IEEE Sensors Letters 3, no. 4 (2019): 1-4.[SCI] (Q3 Journal, IF: 3.1)
- [40] Pancholi, Sidharth, and **Amit M. Joshi**. "Portable EMG data acquisition module for upper limb prosthesis application." IEEE Sensors Journal 18, no. 8 (2018): 3436-3443.(Q3 Journal, IF: 3.1)
- [41] Tripathi, S. K., Mohd Ansari, and **Amit M. Joshi**, " Carbon Nanotubes-Based Digitally Programmable Current Follower", Hindawi VLSI Design Volume 2018, Article ID 1080817, 10 pages, <https://doi.org/10.1155/2018/1080817> [Scopus] [Impact Factor 0.54]
- [42] Jain, Prateek, and **Amit M. Joshi**. "Analyzing the impact of augmented transistor NMOS configuration on parameters of 4x1 multiplexer." Radio electronics and Communications Systems, Springer, Volume 61, Issue 3, pp 121–127, 2018. [Scopus] [Impact Factor 0.46]
- [43] Jain, Prateek, and **Amit Joshi.**, "Full-Wave Bridge Rectifier with CMOS Pass Transistors Configuration", Journal of Circuits, Systems and Computers, June 2018, Vol. 27, No. 06 , pp 1850092-1 to 1850092-17. (Q3 Journal, IF: 1.3)
- [44] Jain, Prateek, and **Amit Mahesh Joshi**, "Low leakage and high CMRR CMOS differential amplifier for biomedical application", Analog Integrated Circuits and Signal Processing, Springer, Vol. 93, no. 1 (2017) pp.71-85. (Q4 Journal, IF: 0.93)
- [45] **Joshi, Amit M.**, Vivekanand Mishra, and Rajendra M. Patrikar., "FPGA prototyping of video watermarking for ownership verification based on H. 264/AVC", Multimedia Tools and Applications , (Springer) 75, no. 6 (2016) pp 3121-3144. DOI: 10.1007/s11042-014-2426-z. (Q2 Journal, IF: 2.3)
- [46] **Joshi, Amit M**, Vivekanand Mishra, and Rajendra Patrikar, "Real Time Implementation of Integer DCT based Video Watermarking Architecture", The International Arab Journal of Information Technology, Vo. 10, No. 6A, August, 2015, pp. 741-747 (Q4 Journal, IF: 0.45)
- [47] **Joshi, Amit M.**, Vivekanand Mishra, and R. M. Patrikar."Design of real-time video watermarking based on Integer DCT for H. 264 encoder", International Journal of Electronics , Taylor and Francis [SCI] Vol. 102, No. 1, September, 2014, pp 141-155, DOI: 10.1080/00207217.2014.954634. (Q4 Journal, IF: 1.0)

BOOK CHAPTERS:

- [1] **Amit M Joshi**, Jaiminkumar Patel, " Hardware Implementation of Audio Watermarking based on DWT Transform", *Digital Identity*, InTech, 2019
- [2] **Amit Joshi**, Sushilkumar Jain, Arunkumar Dwivedi, " Technology and Modeling of DNTT Organic Thin Film Transistors", *Advanced Technologies for Next Generation Integrated Circuits*, IET, 2019
- [3] **Amit M. Joshi**, "VLSI Implementation of Video Watermarking for Secure HEVC Coding Standard", *Cryptography and Information Technology*, CRC Press, 2018.
- [4] **Mr. Amit M Joshi**, Dr. Vivekanand Mishra, Dr. R.M.Patrikar, "Real Time Implementation of Digital Watermarking Algorithms for Image and Video Application", Watermarking/Book2, *In Tech Publication*, Croatia., ISBN 979-953-307-895-2.

- [5] **Mr. Amit M. Joshi**, Dr. Vivekanand Mishra, Dr. R M.Patrikar, "Integer DCT based real-time watermarking for H.264 encoder", *Reconfigurable and Adaptive Computing*, CRC Print ISBN: 978-1-3175-1
- [6] **Mr. Amit M. Joshi**, Monica Bapana, Aniruddh Malpani, Ashwini Kumar Goyal, Manisha Meena, "Hardware Implementation of image and Video watermarking for ownership verification", *Embodying Intelligence in Multimedia Data Hiding*, Science Gate Publishing . ISBN 978-618-81418-8-9
- [7] Amit Joshi, Korada Divya, Hemlata Chhajer, Rakam Sai Kamal, "FPGA Implementation of Multivariate Support Vector Regression for Non-invasive Blood Glucose Estimation Using IoMT Framework", Special Issue: IoT Applications for Healthcare Systems (Springer Book Chapter)
- [8] Amit Joshi, Natasha Singh, " VLSI implementation of sEMG based classification for muscle activity control", Special Issue: Biomedical Signal and Image Processing with Artificial Intelligence (Springer Book Chapter)

REFEREED CONFERENCES PUBLICATIONS (More than 50 Conferene. Only Selected mentioned)

- [1] Sharma, Richa, Amit M. Joshi, Chitrakant Sahu, Gulshan Sharma, K. T. Akindeji, and Sachin Sharma. "Semi Supervised Cyber Attack Detection System For Smart Grid." In 2022 30th Southern African Universities Power Engineering Conference (SAUPEC), pp. 1-5. IEEE, 2022.
- [2] Ahmad, Riyaz, Amit M. Joshi, Dharmendar Boolchandani, and Tarun Varma. "Design of potentiostat and current mode read-out amplifier for glucose sensing." In 2021 IEEE International Symposium on Smart Electronic Systems (iSES)(Formerly iNiS), pp. 64-69. IEEE, 2021.
- [3] Saxena, Gaurav, Chitrakant Sahu, and Amit M. Joshi. "Detection and transmission of pH from food substances using IoT." In 2021 IEEE International Symposium on Smart Electronic Systems (iSES)(Formerly iNiS), pp. 279-280. IEEE, 2021.
- [4] Sharma, Geetanjali, Amit M. Joshi, and Emmanuel S. Pilli. "An Automated MDD Detection System based on Machine Learning Methods in Smart Connected Healthcare." In 2021 IEEE International Symposium on Smart Electronic Systems (iSES)(Formerly iNiS), pp. 27-32. IEEE, 2021.
- [5] Sharma, Giriraj, Amit M. Joshi, and Saraju P. Mohanty. "An Efficient Physically Unclonable Function based Authentication Scheme for V2G Network." In 2021 IEEE International Symposium on Smart Electronic Systems (iSES)(Formerly iNiS), pp. 421-425. IEEE, 2021.
- [6] Sharma, Giriraj, Amit M. Joshi, and Saraju P. Mohanty. "An Efficient Physically Unclonable Function based Authentication Scheme for V2G Network." In 2021 IEEE International Symposium on Smart Electronic Systems (iSES)(Formerly iNiS), pp. 421-425. IEEE, 2021.
- [7] V. Pathak, S. J. Nanda, A. M. Joshi and S. S. Sahu, "FPGA Implementation of High Speed Anti-Notch Lattice Filter for Exon Region Identification in Eukaryotic Genes", 2021 IEEE Computer Society Annual Symposium on VLSI (ISVLSI), Florida, USA, 7-9 July, 2021
- [8] Tripathi, S. K., and Amit Mahesh Joshi. "On the design of improved resistive sensor interface using 32 nm CNFET." *Materials Today: Proceedings* (2021).
- [9] Pathak, Vikas, Satyasai Jagannath Nanda, Amit Mahesh Joshi, and Sitanshu Sekhar Sahu. "VLSI Implementation of Tunable Band-Pass Notch IIR Filter for Localization of Hot spots in Proteins." In *Proceedings of the Fourth International Conference on Microelectronics, Computing and Communication Systems*, pp. 563-575. Springer, Singapore, 2021.
- [10] Sidharth Pancholi, Amit M. Joshi, "A Fast and Accurate Deep Learning Framework for EMG-PR Based Upper-Limb Prosthesis Control", In 2020 IEEE International Symposium on Smart Electronic Systems (iSES)(Formerly iNiS), IEEE, 2020. [Accepted and To be uploaded on IEEE eXplore].
- [11] Sushil Jain, Amit M. Joshi, "Power Efficient Dynamic Comparator for High Speed Digital Circuit", In 2020 IEEE International Symposium on Smart Electronic Systems (iSES)(Formerly iNiS), IEEE, 2020. [Accepted and To be uploaded on IEEE eXplore].

AWARDS & PRIZE

- Runner-up position for iGLU: Intelligent Glucose Measurement Device at Tech-o-Thon: Technasia The Hackathon
- Runner-up in TiE University Global ROI Cohort.
- Served as Mentor for IEEE Engineering in Medicine and Biology Society student mentorship program 2021.
- Received Best Paper Award at IEEE International Conference on Computational Intelligence and Computing Research (ICCIC-2014) during 19-21 December, 2014 at Coimbatore.
- Session chair at IEEE International Conference on Computational Intelligence and Computing Research (ICCIC-2014) during 19-21 December, 2014 at Coimbatore.
- Received UGC Travel Fellowship to attend IEEE Conference TENCON-2016 which was held at Singapore during 22-25

November, 2016.

- Honoured as Session chair at IEEE Conference TENCON-2016 which was held at Singapore during 22-25 November, 2016.
- Received SERB Travel Grant to attend IEEE Conference TENCON-2017 which was held at Penang, Malaysia during 5-8 November, 2017.
- Served as Session chair at IEEE International Symposium on Smart Electronics Systems (iSES) 2018 and iSES 2019.

PROFESSIONAL MEMBERSHIPS

- Senior Member of Institute of Electrical and Electronics Engineers (IEEE), 2008-Current
- Associate Member of Institution of Engineering and Technology (IET), 2014-Current
- Life Member of Institution of Electronics and Telecommunication Engineers (IETE), 2014-Current
- Member of Association for Computing Machinery (ACM), 2014-2017
- Member of The Institute of Electronics, Information and Communication Engineers (IEICE), 2013-2018

PROFESSIONAL SERVICE

- Reviewer for IEEE Access (2018-Current)
- Member of the Board of Studies at Vivekananda University, Jaipur (2019- Current)
- Technical Review committee Member of International Symposium on Smart Electronic Systems (iSES)(Formerly iNiS) 2018 and 2019
- Technical Review committee Member of IEEE Computer Society Annual Symposium on VLSI (ISVLSI), 2020
- Served as External Examiner for M.Tech Dissertation during 2015-16 and 2016-17
- Served as External Examiner at Research Week for Gujarat Technical University from 27/03/2017 to 31/03/2017
- Served in a committee for Student Project Evaluation for DST Rajasthan in Month of February, 2018
- I have already conducted 23 Faculty Development Programme (FDP)/ Short Term Course/ Workshops in the field of VLSI and Embedded Systems, Biomedical Engineering, Technical Skill writing etc.
- Served as Mentor for IEEE Engineering in Medicine and Biology Society student mentorship program 2021.

THESIS & DESSERTATION SUPERVISION:

I have already supervised 07 PhD. Thesis, 32 M.Tech Dissertation and 18 B.Tech Projects in the field of Biomedical Engineering, Healthcare Systems, VLSI and Embedded Design

Dr. Amit M. Joshi.