

**KARM VEER ARYA, Ph. D.**

FIETE, FIE, SMIEEEE, MACM, LMISTE

Professor

ABV-Indian Institute of Information Technology & Management,  
Gwalior-474 015, India

**E-mail:** kvarya@iiitm.ac.in, kvarya@gmail.com

**Ph.** +91- 9406967661; +91-750-2449830



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## 1. Education

- **Ph. D., Indian Institute of Technology—Kanpur, India (2007)**  
*Computer Science and Engineering*
  - Area of research: *Image Processing and Biometrics*
  - Thesis Title: *Certain Efficient Registration and Recognition Algorithms with Application to Face Biometrics*
  - Thesis Supervisors: *Prof. Phalguni Gupta and Prof. Prem K. Kalra*
- **M. E. (Integrated), Indian Institute of Science—Bangalore, India (1991)**  
*Electrical Engineering*
  - Research Area: *Fault Tolerance Computing*
  - Project: *Some Issues on Fault Tolerance in Multistage Interconnection Networks*
  - Project Supervisor: *Prof. Lawrence Jenkins*
- **B. Sc., Rohilkhand University- Bareilly, India (1986)**  
*General (Physics, Chemistry, & Mathematics)*
- **Intermediate, U.P. Board of Secondary Education- Allahabad, India (1984)**  
*Mathematics group (Physics, Chemistry, Mathematics, Hindi, & English)*
- **High School, U. P. Board of Secondary Education- Allahabad, India (1982)**  
*Science group (Science, Mathematics, Hindi, Sanskrit, & English)*

## 2. Research Interest

- **Image Processing:** *Image Enhancement, Medical Imaging*
- **Biometrics:** *Face Recognition, Iris Recognition, Multimodal*
- **Reliability:** *Reliable System Design and Analysis*
- **Information Security:** *Intrusion Detection and Prevention*

## 3. Work Experience (Total: 28+ years)

- Professor, ABV-Indian Institute of Information Technology and Management, Gwalior, India
- Professor, Department of Computer Science & Engineering, Institute of Engineering, Lucknow, India from Sept. 2017 to Feb. 2019
- Professor and Head, Department of Computer Science & Information Technology, at M. J. P. Rohilkhand University, Bareilly, India from Sept. 2007 to Aug. 2008
- Visiting Faculty, Department of Electrical & Computer Engineering, San Diego State University, San Diego, CA, USA June-July 2013
- Reader & Head, Department of Computer Science & Information Technology, at M. J. P. Rohilkhand University, Bareilly, India from Dec. 2005 to Sept. 2007

- Reader, Department of Computer Science & Information Technology, at M. J. P. Rohilkhand University, Bareilly, India from Aug. 1996 till Nov. 2005
- Department of Electronics Engineering, Motilal Nehru Regional Engineering College (now Motilal Nehru National Institute of Technology), Allahabad, India from Dec. 1992 to Aug.1996
- Department of Electrical & Electronics Engineering, B.I.T.S. Pilani, India from Sept. 1991 to Dec. 1992

#### 4. Teaching

Sharing knowledge has always been an enjoyable experience for me. I have taught the following courses at Undergraduate and Postgraduate level:

- *Digital Image Processing, Digital Signal Processing, Discrete Mathematics, Advanced Computer Architecture, Analysis and Design of Algorithms, Computer Organization and Architecture, Computer Vision, Information Security, Probability and Statistics*

#### 5. Thesis/Projects Supervised

(a) *Ph. D. Thesis*: 11 Completed + 05 ongoing (*please see Annexure-I*)

(b) *M. Tech. Thesis*: 83 Completed +04 ongoing (*please see Annexure-II*)

(c) *B. Tech. Projects*: 26 Completed (*please see Annexure-III*)

#### 6. Ph. D. Thesis Reviewed

38 (*please see Annexure-IV*)

#### 7. Patents Published

(i) A System for Noise Robust Face Hallucination (201921025308 A)

(ii) Smart Energy Effective Next Generation 6G Communication System (202011001315 A)

#### 8. Funded Projects

- Automated Identification of Inflammatory Cells in Hematoxylin and Eosin (H&E) Stained Mice Skin Sections from DRDE, Gwalior, India. [Rs. 498000] (**Completed**)
- Person Identification on Android Operating System from DST, New Delhi. [Rs. 2326160] (**Completed**)

#### 9. Book/ Book Chapters Authored

##### Books:

1. Karm Veer Arya and Robin Singh Bhadoria (**Eds.**), “The Biometric Computing: Recognition & Registration”, *CRC Press, Taylor & Francis Group*, Florida, USA, 2019. **ISBN: 978-0-8153-9364-1**
2. Karm Veer Arya, Robin Singh Bhadoria, and Narendra S. Chaudhari (**Eds.**), “Emerging Wireless Communication & Network Technologies: Principle, Paradigm and Performance”, *Springer-Nature*, Singapore, 2018, **ISBN: 978-981-13-0396-8**
3. Sandeep Kumar Agarwal and K. V. Arya, “Security in Mobile Ad-hoc Networks: A Clustering based approach”, *Lap Lambert Academic Publishing GmbH*, Germany, 2012

## Book Chapters:

1. Data security for WBAN in E-Health IoT Applications chapter in book titled Intelligent Data Security Solutions for e-Health Applications **Eds.** Amit Kumar Singh and Mohamed Elhoseny, *Elsevier*, K. V. Arya and Rajasi Gore, 2020. **ISBN:** 978-0-1281-9511-6
2. Acquisition and Computation for Data in Biometric System chapter in Book titled The Biometric Computing: Recognition & Registration, **Eds.** Karm Veer Arya and Robin Singh Bhadoria, *CRC Press, Taylor & Francis Group*, Poonam Sharma and Karm Veer Arya, 2019. **ISBN:** 978-0-8153-9364-1
3. Face Recognition in Low-Resolution Space chapter in Book titled The Biometric Computing: Recognition & Registration, **Eds.** Karm Veer Arya and Robin Singh Bhadoria *CRC Press, Taylor & Francis Group*, Shyam Singh Rajput, Karm Veer Arya, and Poonam Sharma, 2019. **ISBN:** 978-0-8153-9364-1
4. A Study on Dictionary Learning Based Image Reconstruction Techniques for Big Medical Data chapter in book titled Handbook of Multimedia Information Security: Techniques and Applications **Eds.** Amit Kumar Singh and Anand Mohan, *Springer-Verlag*, pp. 377-393, Shailendra Tiwari, Kavkirat Kaur, and K. V. Arya, 2019. **ISBN** 978-3-030-15887-3
5. Internet of Things using Software-Defined Network and Cognitive Radio Network chapter in book titled Sensing Techniques for Next Generation Cognitive Radio Networks, **Eds.** Ashish Bagwari, Jyotshana Bagwari and Geetam Singh Tomar, *IGI Global*, pp. 312-328, Karm Veer Arya and Rajasi Gore, 2019. **ISBN:** 978-152-25-5354-0
6. Architectural Building Protocols for Li-Fi (Light Fidelity) chapter in book titled Emerging Wireless Communication and Network Technologies, **Eds.** Karm Veer Arya, Robin Singh Bhadoria, Narendra S. Chaudhari, *Springer-Verlag*, pp. 127-137, M. Swarnkar, R. S. Bhadoria, K. V. Arya, 2018 **ISBN:** 978-981-13-0396-8
7. CRSN Architecture and its Role in Dynamic Spectrum Management chapter in book titled Introduction to Cognitive Radio Networks and Applications **Eds.** Ashish Bagwari, Jyotshana Kanti, Geetam Singh Tomar, *CRC Press*, pp. 259-278, Rachit Jain, Animesh Kumar Jha, Robin Singh Bhadoria, and K. V. Arya, 2015 **ISBN:** 978-1-49-876298-4
8. Data Privacy and Security in IoT: Design Principles and Applications book chapter in book titled The Internet of Things: Foundation for Smart City, E-health and Ubiquitous Computing, **Eds.** R. Armentano, R. S. Bhadoria, P. Chatterjee, and G. C. Deka, *CRC Press*, pp. 79-98, K. V. Arya and Vishnu Prabhakaran. **ISBN:** 978-1-49-878902-8

## 10. Publications

### • *Journals—Published/Accepted*

1. Shyam Singh Rajput and K. V. Arya, “A robust face super-resolution algorithm and its application in low-resolution face recognition system”, *Multimedia Tools and Applications*, Springer. [**SCI. Impact Factor 2.101**, **ISSN: 1380-7501**]. (**Accepted for Publication**)
2. Rohit Agarwal, A. S. Jalal, and K. V. Arya, “A Review on Presentation Attack Detection System for Fake Fingerprint”, *Mod. Phys. Lett. B*, Vol. 34, No. 5, 2030001, 2020 **World Scientific**. [**SCI. Impact Factor 0.73**, **ISSN: 1793- 6640**]
3. R. Agrawal, A. S. Jalal, and K. V. Arya, “A Multimodal Liveness Detection using Statistical Texture Features and Spatial Analysis”, *Multimedia Tools and Applications*, pp. 1-25, 2020 **Springer**. [**SCI. Impact Factor 2.101**, **ISSN: 1380-7501**].
4. Shyam Singh Rajput and K. V. Arya, “Noise Robust Face Hallucination via Outlier Regularized Least Square and Neighbor Representation”, *IEEE Transactions on Biometrics, Behavior, and Identity Science*, Vol. 1, No. 4, pp. 252-263, 2019. **ISSN: 2637-6407**.

5. Shyam Singh Rajput and K. V. Arya, "A Robust Facial Image Super-Resolution Model via Mirror-Patch based Neighbor Representation", *Multimedia Tools and Applications*, Vol. 78, No. 18, pp. 25407–25426, 2019, **Springer**. [*SCI. Impact Factor 2.101*, [ISSN: 1380-7501](#)].
6. S. S. Rajput, V. K. Bohat, and K. V. Arya, "Grey Wolf Optimization Algorithm for Facial Image Super-Resolution", *Applied Intelligence*, Vol. 49, No. 4, pp. 1324-1338, 2019, **Springer**. [*SCI. Impact Factor 2.882*, [ISSN: 1573-7497](#)]
7. R. Agrawal, A. S. Jalal, and K. V. Arya, "Fake Fingerprint Liveness Detection based on Micro and Macro Features", *International Journal of Biometrics*, Vol. 11, No. 2, pp. 177-206, 2019, **Inderscience**. [*SCOPUS*, [ISSN: 1755-8301](#)]
8. Yadunath Pathak, K. V. Arya, and Shailendra Tiwari, "Feature Selection for Image Steganalysis using Levy Flight-based Grey Wolf Optimization", *Multimedia Tools and Applications*, Vol. 78, No. 2, pp. 1473–1494, 2019, **Springer**. [*SCI. Impact Factor 2.101*, [ISSN: 1380-7501](#)]
9. Yadunath Pathak, K. V. Arya, and Shailendra Tiwari, "An Efficient Low-Dose CT Reconstruction Technique using Partial Derivatives based Guided Image Filter", *Multimedia Tools and Applications*, Vol. 78, No. 11, 14733–14752, 2019, **Springer**. [*SCI. Impact Factor 2.101*, [ISSN: 1380-7501](#)]
10. Vijay Kumar Bohat and K. V. Arya, "A New Heuristic for Multilevel Thresholding of Images", *Expert Systems with Applications*, Vol. 117, pp. 176-203, 2018, **Elsevier**. [*SCI. Impact Factor 4.292*, [ISSN: 0957-4174](#)]
11. Nafis Uddin Khan, and K. V. Arya, "Two Stage Image De-noising by SVD on Large Scale Heterogeneous Anisotropic Diffused Image Data", *Multimedia Tools and Applications*, Vol. 77, No. 17, pp. 22543–22566, 2018, **Springer**. [*SCI. Impact Factor 2.101*, [ISSN: 1380-7501](#)]
12. Yadunath Pathak, K. V. Arya, and Shailendra Tiwari, "Low-Dose CT Image Reconstruction using Gain Intervention-based Dictionary Learning", *Mod. Phys. Lett. B*, Vol. 32, No. 12, 2018, **World Scientific**. [*SCI. Impact Factor 0.73*, [ISSN: 1793-6640](#)]
13. Y. Pathak, K. V. Arya and Shailendra Tiwari, "Fourth-Order Partial Differential Equations based Anisotropic Diffusion Model for Low-Dose CT Images", *Mod. Phys. Lett. B*, Vol. 32, No. 25, 2018, **World Scientific**. [*SCI. Impact Factor 0.73*, [ISSN: 1793-6640](#)]
14. Shyam Singh Rajput, K. V. Arya, and Vinay Singh, "Robust Face Super-Resolution Via Iterative Sparsity and Locality-Constrained Representation", *Information Sciences*, Vol. 463–464, pp. 227-244, 2018, **Elsevier**. [*SCI. Impact Factor 5.53*, [ISSN: 0020-0255](#)]
15. Shyam Singh Rajput, Ankur Singh, K.V. Arya, and Junjun Jiang, "Noise Robust Face Hallucination Algorithm using Local Content Prior based Error Shrunk Nearest Neighbors Representation", *Signal Processing*, Vol. 147, pp. 233–246, 2018, **Elsevier**. [*SCI. Impact Factor 4.086*, [ISSN: 0165-1684](#)]
16. Vijay Kumar Bohat and K. V. Arya, "An Effective Gbest-Guided Gravitational Search Algorithm for Real-Parameter Optimization and its Application in Training of Feedforward Neural Networks", *Knowledge-based Systems*, Vol. 143, pp. 192-207, 2018, **Elsevier**. [*SCI. Impact Factor 5.101*, [ISSN: 0950-7051](#)]
17. Yugarshi Shashwat, Prashant Pandey, K. V. Arya, and Smit Kumar, "A Modified AODV Protocol for Preventing Blackhole Attack in MANETs," *Information Security Journal: A Global Perspective*, Vol. 26, No. 5, pp. 240-248, 2017, **Taylor & Francis** [*ESCI. Impact Factor 0.25*, [ISSN: 1939-3547](#)]
18. Pragya Mishra, K. V. Arya, and Hardev Singh Pal, "Intrusion Detection System Against Colluding Misbehavior in MANETs", *Wireless Personal Communications*, vol. 100, No. 2, 2017, pp. 491-503, **Springer**, [*SCI. Impact Factor 1.916*, [ISSN: 0929-6212](#)]

19. Harish Sharma, Jagdish Chand Bansal, K.V. Arya, and Xin-She Yang, “Levy Flight Artificial Bee Colony Algorithm”, *International Journal of Systems Science*, Vol. 47, No. 11, pp. 2652-2670, 2016, **Taylor & Francis**. [[SCOPUS](#), [ISSN: 0167-8655](#)].
20. M. Saraswat and K. V. Arya, “Automated Microscopic Image Analysis for Leukocytes Identification: A Survey”, *Micron*, Vol. 65, pp. 20-33, 2014, **Elsevier**. [[SCI. Impact Factor 1.530](#), [ISSN: 0968-4328](#)]
21. Jagdish Chand Bansal, Harish Sharma, and K.V. Arya, “Self-Balanced Differential Evolution”, *Journal of Computational Science*, Vol. 5, No. 2, pp. 312–323, 2014, **Elsevier**. [[SCI. Impact Factor 2.502](#), [ISSN: 1877-7503](#)]
22. Harish Sharma, Jagdish Chand Bansal, and K. V. Arya, “Power Law-Based Local Search In Artificial Bee Colony”, *International Journal of Artificial Intelligence and Soft Computing*, Vol. 4, No. 2/3, pp. 164-194, 2014, **Inderscience**. [[SCOPUS](#), [ISSN: 1755-4969](#)]
23. M. Saraswat and K. V. Arya, “Feature Selection and Classification of Leukocyte using Random Forest”, *Medical & Biological Engineering & Computing*, Vol. 52, pp. 1041-1052, 2014, **Springer**. [[SCI. Impact Factor 2.039](#), [ISSN: 1741-0444](#) ]
24. Harish Sharma, Jagdish Chand Bansal, K.V. Arya, Kusum Deep, and Millie Pant, “Self Adaptive Artificial Bee Colony”, *Optimization: A Journal of Mathematical Programming and Operations Research*, Vol. 63, No. 10, 2014, **Taylor & Francis**. [[SCI. Impact Factor 0.822](#),[ISSN: 0233-1934](#)]
25. Poonam Sharma, R. N. Yadav and K. V. Arya, “Pose Invariant Face Recognition using Curvelet Neural Network”, *IET Biometrics*, vol. 3, no. 3, pp. 128-138, 2014, **IET**. [[SCI. Impact Factor 1.836](#), [ISSN: 2047-4946](#)]
26. Nafis Uddin Khan, K. V. Arya and Manisha Pattanaik, “Edge Preservation Of Impulse Noise Filtered Images By Improved Anisotropic Diffusion”, *Multimedia Tools and Applications*, Vol. 73, pp. 573-597, 2014, **Springer**. [[SCI. Impact Factor 2.101](#), [ISSN: 1573-7721](#)].
27. Mukesh Saraswat and K. V. Arya, “Supervised Leukocyte Segmentation In Tissue Images Using Multi-Objective Optimization Technique”, *Engineering Applications of Artificial Intelligence*, Vol. 31, pp. 44-52, 2013, **Elsevier**. [[SCI. Impact Factor 3.526](#), [ISSN: 0952-1976](#)].
28. Harish Sharma, Jagdish Chand Bansal, and K. V. Arya, “Opposition Based Lévy Flight Artificial Bee Colony”, *Memetic Computing*, Vol. 5, No. 3, pp. 213 - 227, 2013, **Springer**. [[SCI. Impact Factor 2.674](#), [ISSN: 1865-9292](#)].
29. Usha Banerjee and K. V. Arya, “Optimizing Operating Cost of an Intrusion Detection System”, *International J. Communications, Network and System Sciences*, 2013, vol. 6, no. 1, pp. 29-36, **Scientific Research**. [[ISSN: 1913-3723](#)]
30. Harish Sharma, Jagdish Chand Bansal, K. V. Arya and Atulya Nagar, “Memetic Search in Artificial Bee Colony Algorithm”, *Soft Computing*, pp. 1911-1928, 2013, **Springer**. [[SCI. Impact Factor 2.472](#), [ISSN: 1433-7479](#)].
31. Mukesh Saraswat, K. V. Arya and H. Sharma, “Leukocyte Segmentation in Tissue Images using Differential Evolution Algorithm,” *Swarm and Evolutionary Computation*, Vol. 11, pp. 46-54, 2013, **Elsevier**. [[SCI. Impact Factor 3.89](#), [ISSN: 2210-6502](#)]
32. Poonam Sharma, R. N. Yadav and K. V. Arya, “Efficient Face Recognition using Generalized Neuron Model,” *Signal Processing*, Vol. 93, No. 6, pp. 1557-1565, 2013, **Elsevier**. [[SCI. Impact Factor 4.086](#), [ISSN: 0165-1684](#)].
33. Nafis Uddin Khan, K. V. Arya, and Manisha Pattanaik, “Histogram Statistics Based Variance Controlled Adaptive Threshold in Anisotropic Diffusion for Low Contrast Image Enhancement”, *Signal Processing*, Vol. 93, No. 6, pp.1684-1693, 2013, **Elsevier**. [[SCI. Impact Factor 4.086](#), [ISSN: 0165-1684](#)].

34. Jagdish Chand Bansal, Harish Sharma, Atulya Nagar and K. V. Arya, "Balanced Artificial Bee Colony Algorithm", *International Journal of Artificial Intelligence and Soft Computing*, Vol. 3, No. 3, pp. 222-243, 2013, **Inderscience**. [ISSN: 1755-4969]
35. Harish Sharma, Jagdish Chand Bansal, K. V. Arya. "Power Law based Local Search in Differential Evolution", *International Journal of Computational Intelligence Studies*, Vol. 2, No. 2, pp. 90-112, 2013, **Inderscience**. [ISSN: 1755-4985]
36. Mukesh Saraswat and K.V. Arya, "Color Normalization of Histopathological Images", *Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization*, Vol. 1, No. 4, 2013, **Taylor & Francis**. [SCOPUS, ISSN: 2168-1171]
37. Harish Sharma, Jagdish Chand Bansal, K. V. Arya, "Fitness based Differential Evolution", *Memetic Computing*, Vol. 4, No. 4, pp. 303-316, 2012, **Springer**. [SCI. Impact Factor 2.674, ISSN: 1865-9292].
38. Jagdish Chand Bansal, Harish Sharma, K. V. Arya and Kusum Deep, "Dynamic Swarm Artificial Bee Colony Algorithm", Special issue on, *Evolutionary and Fuzzy Techniques, International Journal of Applied Evolutionary Computation (IJAEC)*, Vol. 3, No. 4, pp. 19-33, 2012 [dblp, ISSN: 1942-3594 ]
39. U. Banerjee, G. Batra and K. V. Arya, "Feedback Reliability Ratio of an Intrusion Detection System," *Journal of Information Security*, Vol. 3 No. 3, pp. 238-24, 2012. [ISSN: 2153-1242]
40. Mano Yadav, Vinay Rishiwal, and K. V. Arya, "Study of on Demand Adhoc Routing Protocols", *International Journal of Engg. Innovation and Research*, Vol. 1, No. 1, pp. 139-144, 2012 [ ProQuest, ISSN: 2277-5668]
41. Nafis Uddin Khan, K. V. Arya, and Manisha Pattanaik, "A Robust PDE based Image De-Noising Method", *International Journal of Computer and Electrical Engineering*, Vol. 4, No. 3, pp. 303-306, June 2012 [IET INSPEC, ISSN: 1793-8163]
42. Nafis Uddin Khan, K. V. Arya and Manisha Pattanaik, "Image Enhancement and De-noising by Diffusion based Singular Value Decomposition," *International Journal of Computer Applications*, vol. 32, no. 8, pp.14-22, October 2011 [EBSCO, ISSN:0975 - 8887]
43. Saurabh Singh and K. V. Arya, "Mouse Interaction based Authentication System by Classifying The Distance Travelled by Mouse", *International Journal of Computer Applications*, Vol. 17, No. 1, pp. 45-48, 2010. [EBSCO, ISSN: 0975 - 8887]
44. K. V. Arya and K. Agarwal, "An IP Lookup Algorithm using Hashing Formula", *International Journal of Engineering Science Research*, Vol. 1, No.1, 2010, pp. 65-68. [EBSCO, ISSN: 2230-8512]
45. Vinay Rishiwal, Mano Yadav and K. V. Arya, "Finding Optimal paths on Terrain Maps Using Ant Colony Optimization Algorithm", *International Journal of Computer Theory and Engineering*, Vol. 2, No. 3, 2010, pp. 416-419.[ EBSCO, ISSN: 1793-8201]
46. Kshitiz Agarwal and Karm Veer Arya, "An image Compression Algorithm for Discontinuous Series of Similar Pixels", *International Journal of Computer Applications*, Vol. 1, No. 17, 2010, pp. 107-108.[EBSCO, ISSN: 0975 - 8887]
47. Kshitiz Agarwal and Karm Veer Arya, "A Pattern Recognition Algorithm for Continuous Tone Images", *International Journal of Computer Applications*, Vol. 1, No. 17, 2010, pp. 109-111.[EBSCO, ISSN: 0975 - 8887]
48. Mano Yadav, Vinay Rishiwal and K.V. Arya, "Routing in Wireless Adhoc Networks: A New Horizon," *Journal of Computing, USA*, Vol. 1. No.1, pp. 204-209, 2009. [ISSN: 2151-9617]
49. K. V. Arya, P. Gupta, P. K. Kalra and P. Mitra, "Image Registration using Robust M-estimators", *Pattern Recognition Letters*, Vol. 28, No. 15 (2007), pp. 1957-1968, **Elsevier**. [SCI. Impact Factor 2.810, ISSN: 0167-8655].

50. K. V. Arya and R. K. Ghosh, "Designing a New Class of Fault Tolerant Multistage Interconnection Networks", *Journal of Interconnection Networks*, Vol. 6, No. 4 (2005), pp. 361-382, **World Scientific**. [SCOPUS, [ISSN: 1793-6713](#)]
51. K. V. Arya, A. Kamal and P. Gupta, "Boundary Detection in Wireless Sensor Networks using Image Processing Algorithms", *Journal of Electronics and Computer Science, USA*, Vol. 7, No. 2, 2005, pp. 1-8. [[ISSN: 2277-1956](#)]
52. V. Gupta and K. V. Arya, "On the Rate of Pointwise Convergence of Modified Baskakov Type Operators for Functions of Bounded Variations", *Kyungpook Mathematical Journal, South Korea*, Vol. 38, No. 2, 1998, pp. 283-291. [SCOPUS, [ISSN: 0454-8124](#)]

• *Conferences—Published/Accepted*

1. K. V. Arya and Shyam Singh Rajput, "Recognition of Facial Image via Self-Organizing Landmark Location with Approximate Graph Matching", 5<sup>th</sup> Intl. Conference on Management, Engineering, Science, Social Science and Humanities (iCon-MESSSH'20), Aug. 14-15, 2020, Penang, Malaysia. (**Accepted for Presentation**)
2. Pragati Baheti, Mukul Sikka, K. V. Arya, and R. Rajesh, "Federated Learning on Distributed Medical Records for Detection of Lung Nodules", In Proc. 15<sup>th</sup> Intl. Conference on Computer Vision Theory and Applications (VISSAP 2020), Feb. 27-29, 2020, Valletta-Malta.
3. Bharat Garg, Prateek Jeet Singh Sohi, Nikhil Sharma, and K. V. Arya, "Noise Density Range Sensitive Mean-Median Filter for Impulse Noise Removal", Intl. Conference on Innovations in Computational Intelligence and Computer Vision (ICICV2020), Jan. 17-19, 2020, Jaipur, India
4. K. V. Arya, Raj Kuwar Gupta, Shresth Verma, Soumya Agarwal, and Prince Gupta, "IIITM Face: A Database for Facial Attribute Detection in Constrained and Simulated Unconstrained Environments", The ACM India Joint International Conference on Data Science and Management of Data (CoDS-COMAD-2020), Jan. 5-7, 2020, Hyderabad, India.
5. Rohit Agarwal, A. S. Jalal, Subhash Chand Agrawal, and K. V. Arya, "Fake and Live Fingerprint Detection using Local Diagonal Extrema Pattern and Local Phase Quantization", International Conference on Deep Learning, Artificial Intelligence and Robotics, (ICDLAIR), Dec. 07-08, 2019 Jaipur, India
6. Y. Pathak, K. V. Arya, and S. Tiwari, "Computed Tomography Image Reconstruction using Modified and Regularized OSL Method", In Proc. 11<sup>th</sup> International Conference on Contemporary Computing (IC3), Aug. 2-4, 2018, Noida, India. [ISBN: 978-1-5386-6834-4](#)
7. K. V. Arya, Aparna Rajawat, Mahendra Kumar Pandey and Shyam Singh Rajput, "Very Low Resolution Face Recognition using Fused Visual and Texture Features," In Proc. Conference on Information and Communication Technology (CICT-2017), Nov. 3-5, 2017, Gwalior, India. [ISBN: 978-1-5386-1866-0](#)
8. Vijay Kumar Bohat and K. V. Arya, "An Efficient Approach for Numerical Function Optimization," In Proc. Conference on Information and Communication Technology (CICT-2017), Nov. 3-5, 2017, Gwalior, India. [ISBN: 978-1-5386-1866-0](#)
9. Shailendra Tiwari, Rajeev Srivastava and K. V. Arya, "A Nonlinear Modified CONVEF-AD Based Approach for Low-Dose Sinogram Restoration", In Proc. of Intl Conference on Computer Vision and Image Processing (CVIP 2016), Vol. 1, Feb. 26-28, 2016, Roorkee, India. [ISBN: 978-981-10-2104-6](#)
10. Jagdish Chand Bansal, Harish Sharma, and K. V. Arya, "Model Order Reduction in Single Input Single Output Systems using Artificial Bee Colony Optimization", In Proc. Nature

- Inspired Cooperative Strategies for Optimization (NICSO 2011), *October 20-22, 2011, Cluj Napoca, Romania*. [ISBN](#): 978-3-642-24094-2
11. Harish Sharma, Shimpi Singh Jadon, Jagdish Chand Bansal and K. V. Arya, “*Levy Flight Based Local Search in Differential Evolution*”, In Proc. International Conference on Swarm, Evolutionary, and Memetic Computing (SEMCCO 2013), Dec. 19-21, 2013 Chennai, India: pp 248-259. [ISBN](#): 978-3-319-03752-3
  12. Harish Sharma, Jagdish Chand Bansal and K. V. Arya, “*Diversity Measures in Artificial Bee Colony*”, Proc. of 7<sup>th</sup> Intl. Conf. on Bio-Inspired Computing: Theories and Application (BICTA-2012), Dec. 14 -16, 2012, Gwalior, India, Advances in Intelligent Systems and Computing, Vol. 201, 2013, pp 299-314, Springer-India. [ISBN](#): 978-81-322-1038-2
  13. Dinesh Tiwari, K. V. Arya and Mukesh Saraswat, “*Digital Video Watermarking using Scene Detection*”, Proc. of 7<sup>th</sup> Intl. Conf. on Bio-Inspired Computing: Theories and Application (BICTA-2012), Dec. 14-16, 2012, Gwalior, India, Advances in Intelligent Systems and Computing, Vol. 201, 2013, pp. 315-323, Springer-India. [ISBN](#): 978-81-322-1038-2
  14. Mukesh Saraswat and K. V. Arya, “*Leukocyte Classification in Skin Tissue Images*”, Proc. of 7<sup>th</sup> Intl. Conf. on Bio-Inspired Computing: Theories and Application (BICTA-2012), Dec. 14-16, 2012, Gwalior, India, Advances in Intelligent Systems and Computing, Vol. 201, 2013, pp. 123 - 131, Springer-India. [ISBN](#): 978-81-322-1038-2
  15. Mano Yadav, K. V. Arya, and V. Rishiwal., “*Improved Ant Colony Optimization Technique for Mobile Adhoc Networks*”, In Proc. Intl. Conference on International Conference on Computer Science and Information Technology (CCSIT 2011), Jan. 2-4, 2011, Bangalore, India, pp. 1-13. [ISBN](#): 978-3-642-17857-3
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## 11. FDP/Workshop organized

- One-week Faculty Development Programme on “Soft Computing Approaches and its Applications (SCAA-18)” March 12-March 16, 2018 at Institute of Engineering & Technology, Lucknow, India
- One-week Faculty Development Programme on Advanced Digital Image Processing Techniques (ADIPT-18), Feb. 23-Feb. 27, 2018 at Institute of Engineering & Technology, Lucknow, India
- Two-day work shop on network simulator tool (NS2), Nov. 21 -22, 2012 at ABV-IIITM Gwalior, India
- One-week Faculty Development Programme on “Advanced Digital Image Processing Techniques (ADIPT2009)”, Aug. 28-Sept. 2, 2009 at ABV-IIITM Gwalior, India
- One-week Faculty Development Programme on “Recent Trends in Digital Signal processing (RTDSP2009)”, Dec. 13-Dec.18, 2009 at ABV-IIITM Gwalior, India

## 12. Recognitions

1. **Session Chair** in the 15<sup>th</sup> International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISIGRAPP2020), Feb. 27-29, 2020, Valletta, Malta.

2. **Member Technical Programme Committee Chair** of the 15<sup>th</sup> International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISIGRAPP2020), Feb. 27-29, 2020, Valletta, Malta.
3. **Technical Program Chair** in International Conference on *Contemporary Computing and Applications (IC3A 2020)*, Feb. 05 - 07, 2020, Lucknow, India.
4. **Session Chair** in International Conference on “*Innovations in Computational Intelligence and Computer Vision (ICICV2020)*”, Jan. 17-19, 2020, Jaipur, India.
5. **Session Chair** in International Conference on *Sustainable and Innovative Solutions for Current Challenges in Engineering & Technology (ICSISCET-2019)*, Nov. 2-3, 2019, Gwalior, India.
6. **Session Chair** in 13<sup>th</sup> IEEE International Conference on *Information and Communication Technology (CICT-2017)*, Nov. 3-5, 2017, Gwalior, India.
7. **Guest Editorial: Multimedia for Predictive Analytics**, S. K. Singh, A. K. Singh, B. Kumar, S. K. Sarkar, K. V. Arya, *Multimedia Tools and Applications* 77 (7), 2017, 9189-9201.
8. **General Co-Chair** in IEEE International Conf. on “*Industrial and Information Systems (ICIIS 2016)*”, Dec.3-4, 2016, Roorkee, India.
9. **Session Chair** in 13<sup>th</sup> IEEE International Conference on Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2016), *June 28th - July 1st, 2016, Chiang Mai, Thailand*.
10. **Publication Co-Chair** for 7<sup>th</sup> International Conference on “*Computational Intelligence and Communication Networks (CICN 2015)*”, Dec. 12-14, 2015, Jabalpur, India.
11. **Member Technical Programme Committee** of International Conference on “*Computing Communication, and Security (ICCCS 2015)*”, Dec. 4-6, 2015, Pamplemousses, Mauritius.
12. **General Co-Chair Session** in IEEE International Conf. on “*Industrial and Information Systems (ICIIS 2015)*”, Dec.16-18, 2015, Peradeniya, Sri Lanka.
13. **Member Technical Programme Committee** of the Sixth International Conference on “*Communication Systems and Network Technologies (CSNT 2016)*”, March 5-7, 2016, Chandigarh, India.
14. **Member Technical Programme Committee** of International Conference on “*Computational Intelligence & Communication Technology (CICT-2016)*”, Feb. 12-13, 2016, Ghaziabad, India
15. **Member Technical Programme Committee** of 7<sup>th</sup> International Conference on “*Computational Intelligence and Communication Networks (CICN2015)*”, Dec. 12-14, 2015, Jabalpur, India
16. **Member Technical Programme Committee** of International Conference on “*Computational Intelligence & Communication Technology (CICT-2015)*”, Feb. 13-14, 2015, Ghaziabad, India
17. **Member Technical Programme Committee** of International Conf. on “*Signal Processing, Image & Networks (SPIN-2015)*”, Feb.19-20, 2015, Noida, India
18. **Member Technical Programme Committee** of 2015 International Conference on “*Information Systems and Computer Networks (ISCON2015)*”, Oct. 10-11, 2015, Mathura, India.
19. **Session Chair** in 2015 International Conference on “*Signal Processing and Communication (ICSC2015)*”, March 16-18, 2015, Noida, India.
20. **Member National Advisory Committee** of 1<sup>st</sup> International Conference on “*Next Generation Computing Technologies (NGCT-2015)*”, Sep. 4-5, 2015, Dehradun, India.
21. **Member International Technical Programme Committee** of 2015 International Conference on “*Signal Processing and Communication (ICSC2015)*”, March 16-18, 2015, Noida, India.
22. **General Chair** for 9<sup>th</sup> International Conf. on “*Industrial and Information Systems (ICIIS 2014)*”, Dec.14-17, 2014, Gwalior, India.
23. **Member Technical Programme Committee** of 2014 International Conference on “*Information Systems and Computer Networks (ISCON2014)*”, March 1-2, 2014, Mathura, India.

24. **Member Editorial Board** of Cyber Times International Journal of Technology and Management, *New Delhi, India.*
25. **Track Chair** of “*Biometrics based Security*” in International Conf. on Signal Processing, Image & Networks (*SPIN-2014*), April 14-16, 2014, *Noida, India.*
26. **Member Technical Programme Committee** of International Conf. on “Signal Processing, Image & Networks (*SPIN-2014*)”, April 4-16, 2014, *Noida, India.*
27. **Member Technical Programme Committee** of National Conference on Vision, Pattern Recognition, Image Processing and Graphics (*NCVPRIPG 2013*), Dec. 19-21, 2013, *Jodhpur, India.*
28. **Member Technical Programme Committee** of 2014 International Conference on “Information Systems & Computer Networks (*ISCON2014*)”, March 1-2, 2014, *Mathura, India.*
29. **Member Technical Programme Committee** of 3<sup>rd</sup> Students' Conference on “*Engineering and Systems (SCES2013)*”, March 1-2, 2014, *Allahabad, India.*
30. **Member International Technical Programme Committee** of 2013 International Conference on “*Signal Processing and Communication (ICSC2015)*”, Dec. 12-14, 2013, *Noida, India.*
31. **Session Chair** in 2013 International Conference on “*Signal Processing and Communication (ICSC2015)*”, Dec. 12-14, 2013, *Noida, India.*
32. **Session Chair** in IEEE International Conf. on “*Industrial and Information Systems (ICIIS 2013)*”, Dec.16-18, 2013, *Peradeniya, Sri Lanka.*
33. **General Co-Chair** for IEEE International Conf. on “*Industrial and Information Systems (ICIIS 2013)*”, Dec.16-18, 2013, *Peradeniya, Sri Lanka.*
34. **Member Technical Programme Committee** of 7<sup>th</sup> International Conference on “*New Trends in Information Science (NISS2013)*”, June 18-20, 2013, *Jeju Island, Republic of Korea.*
35. **Member Technical Programme Committee** of “*2013 International Conference on New Trends in Information Science, Service Science and Data Mining (ISSDM2013)*”, June 18-20, 2013, *Jeju Island, Republic of Korea.*
36. **Member Technical Programme Committee** of 2<sup>nd</sup> Students' Conference on “*Engineering and Systems (SCES2013)*”, April 12-14, 2013, *Allahabad, India.*
37. **Member Technical Programme Committee** of 2013 International Conference on “Information Systems and Computer Networks (*ISCON2013*)”, March 9-10, 2013, *Mathura, India.*
38. **Member Technical Programme Committee** of 3<sup>rd</sup> International Conference on “*Soft Computing for Problem Solving (SocProS2013)*”, Dec. 26-28, 2013, *Greater Noida, India*
39. **Track Chair** of “*Image Analysis and Pattern Recognition*” in 7<sup>th</sup> International Conf. on *Bio Inspired Computing, Theory and Applications (BICTA-2012)*, Dec. 14-16, 2012, *Gwalior, India.*
40. **Member Technical Programme Committee** of 2012 International Conference on “*Data mining, Computational Intelligence and Business Intelligence (DMCBI 2012)*”, Sept 25-26, *Kauntal, Malasiya.*
41. **Session Chair** in 5<sup>th</sup> International Conference on “*Security of Information and Networks (SIN2012)*”, October 22-26, 2012, *Jaipur, India.*
42. **Session Chair in IEEE** International Conf. on “*Industrial and Information Systems (ICIIS2010)*”, Aug. 06-09, 2012, *Chennai, India,*
43. **Member International Programme Committee of 5<sup>th</sup> International Conference on “Security of Information and Networks (SIN2012)”**, October 22-26, 2012, *Jaipur, India.*
44. **Session Chair in** International Conference on “*Recent Trends of Computer Technology in Academia (ICRTCA2 2012)*”, April 21-23, 2012, *Udaipur, India.*



45. **Session Chair** in 5<sup>th</sup> Indian International Conference on “*Artificial Intelligence*”, Dec. 15-16, 2011, *Tumkur, India*.
46. **Member Programme Committee** of International Conference on “*Computer and Communication Technology (ICCCT-2012)*”, Nov. 23-25, 2012, *Allahabad, India*.
47. **Member Technical Programme Committee** of International Conference on “*Eco-friendly Computing and Communication Systems (ICECCS)*”, August 9-11, 2012, *Cochin, India*.
48. **Session Chair** in International Conference on “*Soft Computing for Problem Solving (SoCProS 2011)*”, Dec. 20-22, 2011, *Roorkee, India*.
49. **Session Chair** in “2011 International Conference on Computer Applications and Network Security”, May 27-29, 2011, *Male, Maldives*.
50. **Publication Co-Chair** for 5<sup>th</sup> IEEE International Conf. on “Industrial and Information Systems (ICIIS2010)”, July 29-Aug. 01, 2010, *Mangalore, India*.
51. **Session Chair** in IEEE International Conf. on “Industrial and Information Systems (ICIIS2010)”, July 29-Aug. 01, 2010, *Mangalore, India*.
52. **Member Editorial Board** of International Journal of Engineering and Science published by SCM, *India*.
53. **Publicity Co-Chair** for IEEE International Conf. on “Industrial and Information Systems (ICIIS 2009)”, Dec.2009, *Peradeniya, Sri Lanka*.
54. **Session Chair** in IEEE International Conf. on “Industrial and Information Systems (ICIIS 2009)”, Dec.2009, *Peradeniya, Sri Lanka*.
55. **Member Technical Programme Committee** of IEEE International Workshop on “Time Critical Applications (IWTCA2009)”, Oct. 12, 2009, *St. Petersburg, Russia*.
56. **Member Technical Programme Committee** of International Conference on “Computer Science and Convergence Information Technology (ICCIT2009)”, Nov. 24-26, 2009, *Seoul, Korea*.
57. **Session Chair** in IEEE International Conference on “Systems, Man, and Cybernetics (SMC2008)”, *Singapore, Oct. 2008*.
58. **Session Chair** in National Conference on "Advances in Information Technology" at Institute of Engineering & Technology, B. R. Ambedkar University, Feb. 2008, *Agra, India*.
59. **Session Chair** in 3<sup>rd</sup> Jammu & Kashmir Science Congress at University of Jammu, Feb. 2008, *Jammu, India*.
60. **Session Chair** in International Conference on “Ubiquitous & Embedded Computing System and Management”, *Dae Gu, South Korea, Nov. 2005*.

### 13. Continuing Education & Special Lectures

- **Keynote speech** in International Conference on “**Innovations in Computational Intelligence and Computer Vision (ICICV2020)**”, Jaipur, India, Jan. 17-19, 2020
- **Expert Lecture** in Department of Computer Application on “**Image Restoration**” at National Institute of Technology, Kurukshetra, Dec. 19, 2019
- **Resource person** in “Interdisciplinary Refresher Course (Research Methodology)” at UGC-Human Resource Development Centre, Gwalior, India, Oct. 18, 2019
- **Keynote speech** in International Conference on “**Defence and Space Technologies, ICDST 2019**” at Institute of Engineering & Technology, Lucknow, India, Aug 23-25, 2019
- **Expert Lecture** in Faculty Development Program on “**Digital Image Processing**” at Meerut Institute of Engineering & Technology, Meerut, June 10, 2019
- **Expert Lecture** in Faculty Development Program on “**Advancement in Computer Science**” at Institute of Engineering & Technology, Dr. Bhimrao Ambedkar University, Agra, India, May, 30, 2019

- *Expert Lecture* in Faculty Development Program on “**Machine Learning**” at Noida Institute of Engineering & Technology, Greater Noida, May, 27, 2019
- *Keynote speech* in 4<sup>th</sup> International Conference on “**Advances in Electrical & Information Communication Technology**”, Bareilly, India, April, 16-18, 2019
- *Keynote speech* in The Conference on “**Academic Research in Engineering, Management & Information Technology**”, Bijnor, India, April, 12-13, 2019
- *Keynote speech* in Seminar on “**Machine Learning for Cyber Security**”, The Institution of Engineers (India), U.P. State Centre, Lucknow, India, April 7, 2019
- *Invited talk* in 5<sup>th</sup> National conference on “**Contemporary Research in Green Computing (CRGC-2019)**”, Bareilly, India, March 9, 2019
- *Keynote speech* in Conference on “**Artificial Intelligence: Research, Innovations & its Applications (CAIRIA-2019)**”, Lucknow, India, Jan. 30-31, 2019
- *Keynote speech* in National Seminar on “**Latest Developments and Challenges in Information Technology and Telecommunications**” Nation Manipal University Jaipur sponsored by Dept. of Higher Educations, MHRD, New-Delhi, Dec. 16-17, 2018
- *Keynote speech* in National Seminar on “**Recent Advances in Computer Vision & Image Processing**” Ghaziabad, July 27- 28, 2018
- *Keynote speech* in National Seminar on “**Recent Advances in Computer Vision & Image Processing**” Ghaziabad, July 27- 28, 2018
- *Expert Lecture* in Faculty Development Program on “**Sensing Based Iot & Cloud Computing**” at Alpine Institute of Technology, Ujjain, India, April 27, 2018
- *Expert Speaker* in Faculty Development Programme on “**Exploration of IoT & Its Applications**” at Institute of Engineering and Technology, Dr. Bhimrao Aambedkar University, Agra, India, Feb. 7-11, 2018
- *Keynote speech* in International Conference on “**Recent Advances in Science, Technology & Management**” at Roorkee, India, April 29-30, 2017
- *Plenary Talk* in Seminar on “**Quality Enhancement of Teaching –Learning Processes**” at MITS Gwalior, India, Feb. 28-March 09, 2017
- *Invited Talk* in the Workshop on “**Applications of MATLAB**” at Agra, India, March 3-4, 2017
- *Expert lecture* in Workshop on “**Recent Trends in Digital Image Processing & Computer Vision**” at Rajasthan Technical University, Kota, India, Jan. 18-22, 2017
- *Invited talk* in FDP on “**Municipal Solid Waste Management**” at Department of Chemical Engineering, MJP Rohilkhand University, Bareilly, India, Dec. 7-11, 2016
- *Keynote speech* in International Conference on “**Advances in Computing, Communication & Automation (ICACCA-2016 (FALL))**” at Bareilly, India, Sept. 30-Oct. 1, 2016
- *Keynote speech* in International Conference on “**Futuristic Trends in, Engineering, Science, Humanities & Technology (FTESHT-2016)**” at Gwalior, India, Jan.23-24, 2016
- *Resource person* in “**Interdisciplinary Refresher Course (Research Methodology)**” at UGC-Human Resource Development Centre, LNIPE, Gwalior, India, Sept. 15- Oct. 10, 2016
- *Keynote speech* in International Conference on “**Computer, Communication & Computational Sciences (IC4S)**,” Ajmer, India, Aug. 12-13, 2016
- *Keynote speech* in International Conference on “**Advances in Computing, Communication & Automation (ICACCA 2016)**” at Dehradun, India, April 8-9, 2016
- *Keynote speech* in International Conference on “**Technology, Innovation and Management for sustainable development,**” at ITM University, Gwalior, India, Feb. 11-13, 2016
- *Expert Talk* in “**State Level Faculty Interaction Seminar and Curriculum Review workshop**” at HBTI Kanpur, India, Jun. 8-9, 2015

- *Invited Talk* in the Workshop on “**Cyber Security: The lifeline of Information & Communication Technology**” at Delhi, India, June 3-5, 2015
- *Keynote speech* in International Conference on “**Communication System & Network Technology**,” Gwalior, India, April 4-6, 2015
- *Invited talk* in 2<sup>nd</sup> National Seminar on “**Communication Networks & Computing (CNC-2015)**,” at ITM University, Gwalior, Jan. 23-24, 2015
- *Expert lecture* in Ph. D. course work on “**How to write technical research paper**” at Lakshmbai National Institute of Physical Education, Gwalior, India, Nov. 10, 2015
- *Expert lecture* in Ph. D. course work on “**Hints on writing research paper**” at Bundelkhand University, Jhansi, India, Jan. 20, 2015
- *Resource person* in Interaction with Research Scholars at UGC Academic Staff College, LNIPE, Gwalior, India, November 5 & 11, 2014
- *Keynote speech* in International Conference on “**Computational Intelligence and Communication Networks (CICN-2015)**,” Jabalpur, India, Dec. 12-14, 2015
- *Resource person* in National Workshop on “Research Report and Thesis Writing in Sport Sciences” at LNIPE, Gwalior, India, September 16 – 18, 2014
- *Invited Talk* in International Conference on “**Soft Computing for Engineering and Technology-2014 (ICSCCTET – 2014)**” at Graphic Era Hill University, Bhimtal, India, Aug. 7-8, 2014
- *Keynote in* IX Regional Academic Encounter and IV International Research and Academic Congress (ERA2014), at IPN-CITEDI, Tijuana, Mexico, April 9-11, 2014
- *Resource Person* in Video Repository on “**Introduction to Biometrics**” of VOU, Kota, March 14, 2014
- *Resource Person* in Video Repository on “**Wireless Ad-hoc Networks-Introduction to Biometrics**” of VOU, Kota, March 14, 2014
- *Keynote* in National Conference on “**Digital Information & Mobile Communication Technology and its Application (DICTAP-2014)**,” at MMM University of Technology, Gorakhpur, India, April 4-5, 2014
- *Expert lecture* in UGC sponsored workshop on “**Next generation networks**” at Institute of Engineering & Technology, Devi Ahilya University, Indore, India, Jan. 27-28, 2012
- *Expert lecture* in Faculty development program at Ambedkar Institute of Technology, New Delhi, India, Jan. 2012
- *Expert Lecture* in Staff Development Program on “**Introduction to Matlab and Matrox Imaging Library (MIL) with Emphasis on Hand on Practices**” at School of Electronics & Communication Engineering, Shri Mata Vashnodevi University, Katra, Jammu, India Dec. 16-29, 2011
- *Expert lecture* in 3<sup>rd</sup> Jmmu & Kashmir Science Congress at *University of Jammu*, Jammu, India, Feb. 2008
- *Keynote speech* in National Conference on “**Advances in Information Technology**” at *Institute of Engineering and Technology, BR Ambedkar University*, Agra, India, Feb. 2008.
- *Expert lecture* at *Nanyang Technological University*, Singapore Oct. 2008
- *Invited lecture* in International “Workshop on Information Technology” at *Catholic University of Dae Gu*, Dae Gu, South Korea, Nov. 2005
- *Invited lecture* in International, “Symposium on Information Technology” at *Yeungnam University*, Dae Gu, South Korea, Nov. 2005

#### 14. Other Academic Related Activities

- **Member** Academic Council at HBTU Kanpur, India
- **Member** Academic Council at IET Lucknow, India
- **Member** Academic Council at Dr. APJ Abdul Kalam Technical University, Lucknow, India from Sept. 23, 2017 to 21.02.2019
- **Member** BoG, Faculty of Engineering & Technology, MJP Rohilkhand University, Bareilly, India from July 2018 till date
- **Member** UP State Council of Institution of Engineers (India) from Nov. 2018 till date
- **Member selection committee** in many Universities/Institutes in India
- **Member** BoG, Institute of Engineering & Technology, Dr. Bhimrao Ambedkar University, Agra, India from April 2018 till date
- **Member** Executive Council at M. J. P. Rohilkhand University, Bareilly, India from March 2006 to July 2007.
- **Member** of evaluation panel for M. Tech. thesis evaluation at National Institute of Technology, Hamirpur, India.
- **Member** of evaluation panel for M. Tech. thesis evaluation at Maulana Azad National Institute of Technology, Bhopal, India, India.
- **Member** Academic Council at M. J. P. Rohilkhand University, Bareilly, India from March 2006 to July 2007.
- **Convener** Board of Studies, Computer Science & Information Technology at M. J. P. Rohilkhand University, Bareilly, India from Jan. 2006 to March 2008.
- **Member Board of Studies** Computer Science & Information Technology at M. J. P. Rohilkhand University, Bareilly, India from Dec. 1996 to July 2002 and from Jan. 2006 to 2008.
- **Member** Faculty Board, Faculty of Engineering at M. J. P. Rohilkhand University, Bareilly, India from Aug. 2001 to July 2002 and from Jan. 2005 to March 2008.
- **External Expert** in Board of Studies of Computer and Information Science at Dr. B. R. Ambedkar University, Agra, India in Sept. 2008.
- **External Expert** in Research Degree Committee of Computer and Information Science at Dr. B. R. Ambedkar University, Agra, India in Sept. 2008.
- **External Expert** in Research Degree Committee of Computer Science/ Computer Science and Engineering at Uttarakhand Technical University, Dehradun, India 2010 and 2011
- **Member** of evaluation panel for M. Tech. thesis evaluation at Rajiv Gandhi Prodyogiki Vishwavidyalaya, Bhopal, India.
- **Member** of evaluation panel for M. Tech. thesis evaluation at UP Technical University, Lucknow, India in 2009, 2010 & 2011
- **External Expert** in Research Degree Committee of Electronics Engineering at Maulana Azad National Institute of Technology, Bhopal, India.
- **Member** of evaluation panel for M. Tech. thesis evaluation at Malviya National Institute of Technology, Jaipur, India.

#### 15. *Administrative Experience*

- **Chairman** Complains Redressing Committee at ABV-IIITM, Gwalior, India
- **Chairman** Research Degree Committee of Computer at Dr. APJ Abdul Kalam Technical University, Lucknow, India from Sept. 23, 2017 till 21.02.2019
- **Dean PG Studies & Research** at Dr. APJ Abdul Kalam Technical University, Lucknow, India from Sept. 23, 2017 to 21.02.2019

- **Coordinator**, B. Tech. 3<sup>rd</sup> year Information Technology, Department of Computer Science & Engineering, IET, Lucknow, India Oct. 2017 to 26.02.2019
- **Member** Academic Council at HBTU Kanpur, India
- **Member** Academic Council at IET Lucknow, India
- **Member** Academic Council at Dr. APJ Abdul Kalam Technical University, Lucknow, India from Sept. 23, 2017 to 21.02.2019
- **Member** BoG, Faculty of Engineering & Technology, MJP Rohilkhand University, Bareilly, India from July 2018 till date
- **Member** UP State Council of Institution of Engineers (India) from Nov. 2018 till date
- **Member selection committee** in many Universities/Institutes in India
- **Member** BoG, Institute of Engineering & Technology, Dr. Bhimrao Ambedkar University, Agra, India from April 2018 till date
- **Member** Executive Council at MJP Rohilkhand University, Bareilly, India from March 2006 to July 2007.
- **Coordinator**, Multimedia & Information Security Lab at ABV-IIITM, Gwalior, India, 2012 to 2017 and March 2019 till date
- **Chairman**, Institute Discipline Committee at ABV-IIITM, Gwalior, India, 2010-2017
- **Chairman**, Hospital and Hygiene Committee at ABV-IIITM, Gwalior, India, 2010-2017
- **Member**, Central Purchase Committee at ABV-IIITM, Gwalior, India, 2008- 2010
- **Head** Department of CS & IT at MJP Rohilkhand University, Bareilly, India, 2005-2008
- **Professor-in-Charge**, University Network at MJP Rohilkhand University, Bareilly, India, 2005-2008
- **Head** Department of CS & IT at MJP. Rohilkhand University, Bareilly, India, 2001-2002
- **Professor-in-Charge**, Students' Affairs at MJP. Rohilkhand University, Bareilly, India, 1997-2000
- **Warden**, BDA Hostel at M.J.P. Rohilkhand University, Bareilly, India, 1996-1999
- **Professor-in-Charge**, Electronics Society at MNREC Allahabad, India, 1993-1996
- **Assistant Warden**, Tagore Hostel at MNREC Allahabad, India, 1993-1995

#### 16. **Important Administrative Contributions**

As a **Dean PG Studies & Research** at **AKTU Lucknow, India** the following schemes have been initiated and implemented successfully during my tenure:

- Regularize the admission and monitoring of the Ph. D. program. First time in the history of AKTU the admission to Ph. D. program is being initiated by me in both the semester
- Expedite the Ph. D. thesis evaluation and consequently record numbers of Ph. D. degrees have been awarded in the convocations of 2017 and 2018
- Funded project scheme to fund the technical projects submitted by faculty members of affiliated/associated colleges/institutes of AKTU
- Travel grant for faculty members of affiliated/associated colleges/institutes of AKTU to attend international conferences abroad
- Providing the funding for conducting national/international conference in affiliated/associated colleges/institutes of AKTU
- Encouraging faculty members for developing collaboration with foreign universities by providing financial assistant to the faculty member for visiting and spending 2-3 months in foreign university
- Encouraging faculty members of affiliated/associated colleges/institutes of AKTU for publishing in quality journals. Hence, providing extra funding for attending international

conferences, and funded technical projects for the faculty members publishing maximum number of SCI indexed papers

- Inclusion of area specific external experts in Ph. D. Research Degree Committees for quality evaluation of the students' performance

### ***Annexure-I***

#### **Ph. D. Thesis Supervision**

<b>S. No.</b>	<b>Title of the thesis</b>	<b>Name of Student</b>	<b>Year</b>	<b>Completed/ongoing</b>
1.	Study of Routing Issues in Mobile Ad Hoc Networks	Mano Yadav	2012	Completed
2.	Development of PDE based Nonlinear Diffusion Techniques for Image Enhancement and De-noising	Nafis Uddin Khan	2013	Completed
3.	Design, Analysis and Applications of Nature Inspired Algorithms	Harish Sharma	2013	Completed
4.	Design & Development of a Pattern Recognition System for Quantitative Analysis of Histopathological Images	Mukesh Saraswat	2013	Completed
5.	Certain Face Recognition algorithms for Person Identification	Poonam Sharma	2014	Completed
6.	Performance and Reliability of Intrusion Detection Systems for Mobile Ad-hoc Networks	Usha Banerji	2014	Completed
7.	Study and Development of Improved Methodology for Time Series Data Mining	Sunil Bhaskaran	2018	Completed
8.	Some Nature-inspired Algorithms for Image Processing Applications	Vijay Bohat	2019	Completed
9.	Efficient methods for Low-Dose Computed Tomography Image Reconstruction	Yadunath Pathak	2019	Completed
10.	Hallucination Algorithms for Low-resolution Images and Their Application in Face Recognition	Shyam Singh Rajput	2019	Completed
11.	Multimodal liveness detection system for presentation attacks on fingerprint and iris biometrics	Rohit Agrawal	2020	Completed
12.	Designing Efficient Approach for Face Recognition on Large Face Database	Nagesh Sharma	2016	Ongoing
13.	Designing Modified non-linear Feedforward Bidirectional Associative	Manisha Singh	2016	Ongoing

	Memory Models			
14.	Reliability Analysis of Engineering Systems using Learning Automata	Abhishek Singh	2018	Ongoing
15.	Reliable Designing of Communication Systems	Deepali Awasthi	2019	Ongoing
16.	Image Hallucination	Saurabh Agrawal	2019	Ongoing

## *Annexure-II*

### *M. Tech. Thesis Supervision*

<b>S. No.</b>	<b>Title of the thesis</b>	<b>Name of Student</b>	<b>Year</b>	<b>Completed/ ongoing</b>
1.	Collision Attack on AES using Fault Injection	Siddharth Kr. Singh	2009	Completed
2.	Efficient Remote User Authentication using Fingerprint based Smart card	Ravi Kant	2009	Completed
3.	SABARD: Self Assured Black hole Attack Detection on AODV Protocol in MANET	Kumar Sidharth Choudhary	2009	Completed
4.	SCTP-Sec: A Secure Transmission Control Protocol	Rahul Choudhari	2009	Completed
5.	Intrusion Detection System for Wireless Sensor Network	Mukesh Tiwari	2009	Completed
6.	An Ontology-Based Adaptive Topical Crawling Algorithm for Accessing Deep Web Content	Baby Ramya Vadlamudi	2010	Completed
7.	An Architectural Framework for Web Information Retrieval based on User's Navigational Pattern	Rohit Agarwal	2010	Completed
8.	An Architectural Framework of a Crawler for Locating web Repositories using Multi-agent Model for Searching and Filtering Replicated Web Collection	Shashi Shekhar	2010	Completed
9.	An Efficient Face Recognition System	Krishan Pal Gangwar	2010	Completed
10.	Automatic Facial Expression Recognition for Sign Language	Mukesh Saraswat	2010	Completed
11.	Design of an Efficient Algorithm for All Pair Shortest Paths in a Graph	Bhanu Parakash Dubey	2010	Completed
12.	A Modified and Adaptive Subcarrier Allocation Schemes in Wireless OFDMA System in WiMax Networks	Surjeet Kumar	2010	Completed
13.	Distributed Detection over Adaptive Network	Girija Shanker Sahoo	2010	Completed
14.	Distributed Data Mining on Grid Environment	Sirisha Lanka	2010	Completed
15.	Biometrics Template Security	Anuj Tiwari	2011	Completed



16.	A New Technique Based on Framed Watermarking for Secure Message Transmission	Lovelesh Saxena	2011	Completed
17.	Artificial Hygiene For Computer Systems	Ashu Sharma	2011	Completed
18.	Authentication of User Profiles on Social Networking Sites	Isha Raina	2011	Completed
19.	Detection of Wormhole Attack in MANETs using Dual Phase Technique	Vaibhav Gupta	2011	Completed
20.	Three Phase Technique for Intrusion Detection in Mobile Ad Hoc Network	Prerna Vashishtha	2011	Completed
21.	Person Recognition Using Multimodal Biometrics	Rekha Kumari	2011	Completed
22.	Designing Intrusion Detection System to Detect Delay Attack and Data Integrity Attack in Hierarchical Wireless Sensor Networks	Ankit Katiyar	2011	Completed
23.	Adaptive Routing Algorithm in MANET using Ant Colony Optimization	Rahul Jain	2011	Completed
24.	Multimodal Biometrics	Rajesh Ranjan	2011	Completed
25.	Secure Communication using Clustering in Mobile Ad-Hoc Networks	SandipAgarwal	2011	Completed
26.	Modified Quality of Service Routing (MQR) Scheme for MANE	Amit Garg	2011	Completed
27.	Interference Range Avoidance MAC Protocol in Wireless Ad-Hoc Networks	Parul Agrawal	2012	Completed
28.	Detection and Prevention of MITM to the HTTPS Protocol	Mohd. Saqib	2012	Completed
29.	Design of Visual Secret Sharing Schemes	Arun Kumar Yadav	2012	Completed
30.	Intrusion Prevention using Snort	Hemant Kumar	2012	Completed
31.	Visual Secret Sharing in Reversible Style	Rajat Rastogi	2012	Completed
32.	Target Detection and Identification for through the Wall Radar Image	Akhilendra Singh	2012	Completed
33.	Region Incrementing Visual Cryptography	GauravChauhan	2012	Completed
34.	Cost Efficient Approach for Secure Image Transmission	Ashish Nayan	2012	Completed
35.	Enhancing efficiency of Digital Watermarking Techniques	Gyanendra Kumar	2012	Completed
36.	Intrusion Detection and Prevention in Wireless Sensor Networks	Hemant Kumar Gangwar	2012	Completed
37.	An Enhanced Approach of Routing Protocol - AODV with Reliable Packet Delivery and Route Repairing using Alternate Path Mechanism in MANET	Rakesh Galav	2012	Completed
38.	Automatic Color Contrast based Image Resizing	Abhimanyu Panwar	2012	Completed

39.	Detection and Prevention Against ARP Poisoning Attack using Modified ICMP and Voting	Prerna Arote	2013	Completed
40.	Detection and Mitigation of Cross-site Scripting attack in Web based Applications	Reenu Rajput	2013	Completed
41.	An Improved Image Authentication Technique using Random-Sequence based Secret -Sharing Scheme	Sapna Kushwah	2013	Completed
42.	Error Resilient Transmission over Wireless Networks with Improved Flexible Macroblock ordering	Saumya Bhadauria	2013	Completed
43.	Secure Routing Protocol Against DDOS Attack in WSN	Surendra Nagar	2013	Completed
44.	An Effective Face recognition under Occlusion	Anurag Mishra	2013	Completed
45.	Robust Iris Recognition System based on Local Descriptors	Girish Gupta	2013	Ongoing
46.	Video Compression using Motion Vector Estimation	Purnima Prasad	2013	Completed
47.	Hand Writing Recognition System	Sachin Tolay	2013	Ongoing
48.	Security Issues in Wireless AdHoc Networks	Shyam Singh Rajput	2013	Completed
49.	Power Aware Stable And Secure Routing in MANET	Kuldeep Narayan Tripathi	2013	Completed
50.	Securing AODV Protocol against Blackhole Attack using Trust based Routing in MANET	Dhiraj Paroha	2013	Completed
51.	Performance Analysis for Diversity Multiplexing Delay Tradeoff in Decoded Forward MIMO Relay Network	Praveen Pawar	2013	Completed
52.	Reliable Foster File Transfer for Cloud	Tushar	2013	Completed
53.	Efficient Hardware Architecture of RSA Crypto Co-processor	Rishabh Awasthi	2013	Completed
54.	Medical Image Registration using Image Decomposition	Naveen Jaiswal	2013	Completed
55.	Efficient Face Recognition using Morphological Operations	Harendra Upraity	2014	Completed
56.	Improving the Performance of Intra Prediction in H.264 Standard with the help of Edge based Rate Distortion Optimization	Abhishek Tomar	2014	Completed
57.	Efficient Face Recognition under Partial Occlusion and Illumination	Anukriti	2014	Completed
58.	An Enhanced Graphical Password Scheme for Touch Screen Devices	Rishi Dev Singh	2014	Completed
59.	Developing an Automated Testing Framework for Web Application	Hemdutt Verma	2014	Completed
60.	S-ALERT: Secure Anonymous Location-	Rashi Saxena	2014	Completed

	Based Efficient Routing Protocol			
61.	A Lossless Video Compression Algorithm	Ngali Tato	2014	Completed
62.	Securing Gateway Selection Protocol in Hybrid MANET using DYMO Routing	Dharmveer Singh Bhadoriya	2014	Completed
63.	Improved Feature Based Offline Signature Enhancement and Verification	Rohit Kumar	2014	Completed
64.	Modified Arnold Transformation for Image Encryption using RGB Pixel Scrambling	Neha Rajput	2014	Completed
65.	Parameter Optimization of H.265/HEVC Encoder	Rishiraj Sharma	2015	Completed
66.	Real Time Face Recognition using LBP Features	C. Sai Kumar	2015	Completed
67.	Person Identification using Face and Iris Biometrics	Dolla Sai Srinivas	2015	Completed
68.	Fast and Efficient Face detection and Recognition for Surveillance	Abhinav Adarsh	2015	Completed
69.	An Efficient Automated Testing Framework for Web-based Applications	Sonu Lamba	2015	Completed
70.	Intrusion Detection System Against Colluding Misbehaviour in MANETs	Pragya Mishra	2015	Completed
71.	Encoder Complexity Reduction in High Efficiency Video Coding (H.265/HEVC	Hardev Pal Singh	2015	Completed
72.	Real time Vehicle Detection and Tracking	Saurabh Behwal	2015	Completed
73.	RGB-D Face Recognition using Texture Attribute and Local Depth Patterns	Dwarika Prasad Kushwaha	2016	Completed
74.	Modified Reversible Data Hiding in Encrypted Images using AC Coefficients	Harendra Singh	2016	Completed
75.	Development of Bimodal Systems using Match Score Level Fusion	Seema Ingle	2016	Completed
76.	Query Optimization and Aggregation Mechanisms Based on Variable Smart Device as Central Node for Tracking Body Vitals	Keshav Lad	2016	Completed
77.	Benchmarking of Databases in Local Computing Environment	Rahul Anand Sinha	2016	Completed
78.	Improved Spectrum Sensing and Utilization in VoIP based two Tier cognitive Radio Network using Space Time Sensing	Vineet Kumar	2016	Completed
79.	Performance Analysis and Optimal Resource Allocation of Hybrid Cognitive Gaussian Two Way Relay Channel	Gunnery Srinath	2016	Completed
80.	An Improved Noise Generation Technique in Backscatter Wireless Communication	Vishnu Prakaran	2016	Completed

81.	Low Resolution Face Recognition	Ankur Singh	2017	Completed
82.	Very Low Resolution Face Recognition using Fused visual and Texture Features	Aparna Rajawat	2017	Completed
83.	Banana Plant Leaves Disease Detection using Image Processing	Vikram Singh Dhinwal	2017	Completed
84.	A New Adaptive Decision based Median Filter for Random Value Impulse Noise and Noise Robust Image Hallucination Method	Rahul Kumar	2019	Ongoing
85.	Gait Profiling and Recognition System	Ashish Kumar Anshu	2019	Ongoing
86.	Facial Image Super Resolution Via Sparse Representation	Ashish Chourasiya	2019	Ongoing
87.	Energy Efficient Target Coverage in Wireless Sensor Network using Learning Automata	Jyoti	2019	Ongoing

### *Annexure-III*

#### **B. Tech. Project Supervision**

Sl. No.	Title of Project	Institute	Name of Student[s]	Year
1.	Federated Learning on Distributed Databases: Diagnosis of Lung Cancer	ABV-IIITM Gwalior, India	Mukul Sikka, Pragati Baheti	2019
2.	Aircraft Engine Reliability Analysis using Machine Learning Algorithms	ABV-IIITM Gwalior, India	Deepankar Singh, Mithilesh Kumar	2019
3.	Face Recognition in Large Database	ABV-IIITM Gwalior, India	Rishbh Baronia	2014
4.	Face Recognition on Android Operating System	ABV-IIITM Gwalior, India	Kumar Saurabh Rajkumar Munia	2014
5.	Speaker Dependent Emotion Detecting Software through Voice with Feature Selection	ABV-IIITM Gwalior, India	Laxmi Narayan Parikshit Raj Bharati Utkarsh Soni	2014
6.	Intrusion Detection System	ABV-IIITM Gwalior, India	Abhishek Tomar Harendra Upraity Rohit Kumar	2012
7.	An Analysis of Hough Transform and Harris Corner Detection on CPU and GPU	ABV-IIITM Gwalior, India	Rahul Godha Shailesh Kumar Hemant Kumar	2012
8.	Speaker Recognition	ABV-IIITM Gwalior, India	Sachin Toley Purnima Prasad	2011
9.	Application of Multimodal Biometrics to Internet	ABV-IIITM Gwalior, India	Kapil Kumar Gupta Anurag Singh Girish Kumar Gupta	2011
10.	Finger Print based smart card	ABV-IIITM Gwalior, India	Ishan Agarwal Achyut Shukla Thomas M. Tharkan	2010
11.	Image Enhancement	ABV-IIITM Gwalior, India	Gyanendra Kumar Divyanshu Ranjan Anurag Gupta	2010
12.	Face Recognition using PCA and Multi-class SVM	ABV-IIITM Gwalior, India	Karishma Chawla, Veena Bansal	2010
13.	Secret Image Sharing	MJP Rohilkhand University, Bareilly, India	Hirdesh Kumar	2008
14.	2-D Image registration	MJP Rohilkhand University, Bareilly, India	Gopal Tripathi	2008
15.	Finding optimal paths on terrain maps using ant colony algorithm	MJP Rohilkhand University, Bareilly, India	Illa Nivedita, Anubha Goswami	2007

16.	Registration of SAR Images	MJP Rohilkhand University, Bareilly, India	Suvesh Mathur	2006
17.	Comparative Study of CDMA and TDMA based networks	MJP Rohilkhand University, Bareilly, India	Sanjay Pal Singh Anuradha Pal Yamini Tripathi Sunil Sharma	2000
18.	Performance evaluation of Fault Tolerant Interconnection Networks	MJP Rohilkhand University, Bareilly, India	Pushpendra Singh Priyanka Srivastav Charu Agrawal Sahmeen Mazhar	1999
19.	Hardware Implementation of Intercom System	MNREC Allahabad, India	Deepesh Tiwari Vandna Singh	1996
20.	Design and Implementation of Digital IC Tester	MNREC Allahabad, India	Abhay Lal Jha	1996
21.	Study of Fault Tolerant Multistage Interconnection Networks	MNREC Allahabad, India	Prafull Singhal Deepak Vajpayee Amitabh Gupta	1994
22.	Performance Study of MINs	MNREC Allahabad, India	Ashutosh Agrawal, Rakesh Sharma	1994
23.	Road Traffic monitor using Microprocessor	MNREC Allahabad, India	Sanjeev Khushu	1994
24.	Implementation of key board Driver	MNREC Allahabad, India	Rajeev Khushu Rohit Suri	1993
25.	CASE tool development	MNREC Allahabad, India	Rajeev Pal Rajeev Sikka Akshat Mukherji	1993
26.	Implementation of mouse driver	MNREC Allahabad, India	Diljeet Kaur	1993

## *Annexure IV*

### **Ph. D. Thesis Reviewed**

1. *Saurabh Srivastava*, "Study of Pattern Recognition Techniques for Noisy English Alphabets and Words with Soft Computing Techniques", *Bundelkhand University Jhansi, India. (2008)*
2. *Vandna*, "A Fuzzy Set Theoretic Approach to CPU Scheduling", *Ch. Charan Singh University, Meerut, India. (2010)*
3. *Brijmohan Singh*, "Text Extractions in Degraded and Stylistic", *Uttarakhand Technical University, Dehradun, India. (2012)*
4. *Annapurna Singh*, "QoS Based Performance Analysis of Mobile Ad-Hoc Network", *Uttarakhand Technical University, Dehradun, India. (2012)*
5. *Sharad*, "Power Management Optimization and Energy Efficient Communication Protocol for Ad-Hoc Sensor Network", *Uttarakhand Technical University, Dehradun, India. (2012)*
6. *Kuldeep Yadav*, "Content Based Medical Image Retrieval using Compressive Sensing", *Uttarakhand Technical University, Dehradun, India. (2012)*
7. *Sushila Kamble* "Imperceptibility and Robustness Improvement in Digital Image Watermarking", *MNNIT, Allahabad, India. (2013)*
8. *Tripti Sharma*, "Energy Optimization Through Enhancing the Stable Period of Routing Algorithms in Wireless Sensor Network", *Lingaya's University, Faridabad, India. (2015)*
9. *Shrinivasrao B. Kulkarni*, "Efficient Object Recognition Techniques using Iris Biometric", *Graphic Era University, Dehradun, India. (2014)*
10. *Tanvi Agrawal*, "Development of Energy Efficient Algorithms for Passive RFID Tag Identification" *NITIE Mumbai, India. (2015)*
11. *Shivani Mishra*, "Modeling and Analysis of Complex Cyber Attack", *MNNIT, Allahabad, India. (2015)*
12. *Vikas Pandey*, "Image Processing using Wavelets" *R D University, Jabalpur, India. (2015)*
13. *Amit Dua*, "Efficient Data Dissemination in Vehicular Ad Hoc Networks", *Thapar University, Patiala, India. (2016)*
14. *Santosh Kumar*, "Cattle recognition Based on Face and Muzzle Point Features", *I. I. T. (BHU), Varanasi, India. (2017)*
15. *Rishav Singh*, "Study & Development of new Born Face Recognition Techniques in A Semi-Constrained Environment", *I.I.T (ISM), Dhanbad, India. (2017)*
16. *Reena Singh*, "Spatial and wavelet Transform Domain Denoising Techniques for Quality Improvement of Decompressed and Noisy Images" *MNNIT, Allahabad, India. (2017)*
17. *Thakkar Falgunkumar Navinchandra*, "Discrete and Complex Wavelet Transform based Watermarking Schemes for Digital Images", *MNNIT, Allahabad, India. (2018)*
18. *Parul Pandey*, "Design and Performance Evaluation of Replica Hosting System", *Dr. APJ Abdul Kalam Technical University, Lucknow, India. (2017)*
19. *Rajat Goel*, "SecREAD: Security-aware Requirements Elicitation, Assessment and Design Methodology", *MNIT Jaipur, India (2018)*
20. *Apoorva Agrawal*, "Designing of Optimal Filters", *University of Delhi, Delhi, India. (2018)*
21. *Richa Barsaniya*, "Some Investigations into Wave Digital Filter Theory and Design", *University of Delhi, Delhi, India. (2018)*
22. *Sandip Kumar Budhani*, "Development of Classifier Ensemble for Concept Drift", *Banasthali Vidyapith, Banasthali, India. (2018)*
23. *Abhilasha Singh*, "Design and Analysis of Digital Image Watermarking Techniques for Digital Right Management", *Amity University, Noida. (2018)*

24. *Indrajeet Kumar*, "Analysis and Classification of Breast Density using Mammographic Images", *Uttarakhand Technical University, Dehradun, India. (2018)*
25. *Arti Taneja*, "Automatic Detection of Diseases using Multilevel Set Methods", *Amity University, Noida, India. (2018)*
26. *Lendale Venkateswarlu*, "Simulation Studies on Medical Image Watermarking for Integrity and Authenticity", *Jawaharlal Nehru Technological University Anantapur, Ananthapuramu, India. (2019)*
27. *Kavita Gupta*, "Energy Efficient Secure Routing Protocol for Mobile Wireless Sensor Networks", *Maharishi Markandeswar University, Mullana, Ambaa, India. (2019)*
28. *Jyoti Agarwal*, "Design and Analysis of Computation Model for Estimating the Usability of Component based Software System", *Amity University, Noida, India. (2019)*
29. *Kuldeep Lamba*, "Optimizing Operations for Big Data: Methods and Methodologies", *I.I.T. Delhi, India. (2019)*
30. *Raju Pal*, "Enhancement of Bag-of-Features Method for Classification of Histopathological Images", *Jaypee Institute of Technology, Noida, India. (2019)*
31. *Vuppuluri Prem Prakash*, "Heuristics and Meta-heuristics for some Constrained Spanning Tree Generation Problems", *Dayalbagh Educational Institute (Deemed University), Agra, India. (2019)*
32. *Shubham Goel*, "Personalization of Web Search using Social Information", *Thapar University, Patiala, India. (2020)*
33. *Shashi Gurung*, "Security in Wireless Mobile Ad-Hoc Networks", *NIT Hamirpur, India. (2020)*
34. *Rajit Nair*, "Improve the Classification of Genes Expression using Deep Learning Methods", *MANIT Bhopal, India. (2020)*
35. *Premnarayan Arya*, "Performance Evaluation of Machine Learning based Sentiment Analysis Techniques", *MANIT, Bhopal, India. (2020)*
36. *Saurabh Mishra*, "Designing of Dynamic Allocation Protocol for Mobile IP for Infrastructure-less Network", *Uttarakhand Technical University, Dehradun, India. (2020)*
37. *Amrit Kumar Agrawal*, "Automated Face Recognition in Unconstrained Environment", *Dr. APJ Abdul Kalam Technical University, Lucknow, India. (2020)*
38. *Prashant Kumar*, "ASIC Implementation of Multiplier-less 2-D Digital Filters", *MNNIT Prayagraj, India. (2020)*