CURRICULUM VITAE

**Prof (Dr.) Manoj Kumar**

Male, Indian, Born on February 10th, 1972

**Present Position:** Professor and Head, Department of Information Technology

Guru Ghasidas Vishwavidyalaya

A Central University, Bilaspur (C.G).

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**Google Scholar ID:**

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https://www.researchgate.net/profile/Manoj-Kumar-256

**Professional Experience:**

* 25 Years Teaching/Research experience in the field of Computer Science
* 1.8 Years in Industry

**Teaching:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.N. | Designation | From | To | Organization /Institution |
| 1 | Professor | 11.12.2023 | Till Date | Guru Ghasidas Vishwavidyalaya (A Central University) Bilaspur (C. G). |
| 2 | Associate Director | 08.02.2022 | 06.12.2023 | TBI, GLA University, Mathura |
| 3 | Professor | 01.06.2019 | 06.12.2023 | GLA University, Mathura |
| 4 | Associate Professor | 01.03.2012 | 31.05.2019 | GLA University, Mathura |
| 5 | Reader | 01.03.2009 | 28.02.2012 | GLA Institute of Technology and Management, Mathura |
| 6 | Sr. Lecturer | 28.03.2007 | 28.02.2009 | GLA Institute of Technology and Management, Mathura |
| 7 | Lecturer | 15.04.2002 | 27.03.2007 | GLA Institute of Technology and Management, Mathura |

**Industry:**

* **April 2000 to April 2001:** Worked as a “Programmer cum Analyst” in ‘M/S Bhasin Motors Pvt. Ltd.’
* **August 1999 to March 2000:** Worked as a “Software Developer” in ‘Metamor Software Solutions.’

**Subject & Field of Specialization:** Computer Sciences & Engineering: Digital Image Processing, Cryptography, Advance Computing and Optimization.

**Qualifications**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Degree/Certificate** | **Name of Institution** | **Course Specialisation** | **Passing Year** | **Percentage/**  **CGPA** |
| Doctor of Philosophy  (PhD)**\*** | GLA University, Mathura, U.P. | Computer Sciences & Engineering | 2017 | - |
| Master of Technology  (M. Tech) **\*\*** | Uttar Pradesh Technical University, Lucknow | Computer Sciences & Engineering | 2009 | 8.86/10 |
| Bachelor of Technology  (B. Tech) | Nagpur University, Nagpur, M.S. | Computer Sciences & Engineering | 1999 | 64% |

**\*PhD Thesis:** Detecting Multiple Moving Objects and Interpreting their Motion Pattern in Crowded Environment.

**\*\*M. Tech Thesis:** Reduce Time Complexity (RTC) Technique for Finding Frequent Item Set in Association Rule Mining.

**Achievements:** Total Research Publication- 71, Three (03) Patents Granted and Six (06) Patents Published, two (02) Books Published.

* Received Grant and Sanction of **Rs 5.20 Lakhs** under **STI (Science, Technology and Innovation) based Entrepreneurship Training Program** Supported by Department of Science & Technology, **Ministry of Science & Technology**.
* Received Grant and Sanction of **Rs 2.1 Cr** under **SISFS (Startup Seed Fund Scheme**) Implementing Agency is **DPIIT (Department for Promotion of Industry and Internal Trade)** Supported by **Ministry of Commerce and Industry**.
* Established **MSME Incubation Component HI/BI** to support our Startups at SPARKL GLA TBI FOUNDATION, GLA University, Mathura, on 26 June, 2023.
* Established a **TBI-Technology Based Incubator** in Feb, 2021, called as **“SPARKLE GLA TBI FOUNDATION” (Section-8 Company)** supported by **Ministry of IT & Electronics, Govt. of Uttar Pradesh**. Responsible to bring more than **Rs 5.50 Cr** to GLA University.
* Established a pre-Incubation Center on Jan, 2019, called as **“StartUp LaunchPad”** which is fully supported by GLA University.
* Established “**NewGen IEDC**” a prototyping Center and taking care of this center in the capacity of ‘**Chief Coordinator’** since 2017 to Dec 2023 which is supported by **NSTEDB, DST, Govt. of India**. Responsible for bringing fund of **Rs 2.87 Cr** to GLA University.
* Worked as Coordinator and SPOC of **National Innovation and Startup Policy (NISP).**
* Worked as SPOC of **Atal Ranking of Institutions based on Innovation Achievements (ARIIA)** since its inception and up to session 2022-23 (we got ranked in Band 1-50 in NIRF Innovation-2023.)
* Worked as Core member in **NAAC Committee and Central Committee** of the university.
* Played instrumental role in establishing **New Startups culture** at GLA University, Mathura.
* Completed “**NIMAT** – Program” supported by **NSTEDB, DST, Govt of India**. Responsible for bring fund of **Rs 16 Lacs for session 2018-19 and Rs 8 Lacs for session 2019-20 respectively at** GLA University, Mathura.
* Organized total **24 programs** under “**NIMAT**” scheme which includes **EAC, TEDP, WEDP, EDP,**
* Established **IIC- Institution Innovation Council**, in 2018 worked as founder President which is Approved by **Ministry of HRD, Govt of India.**
* Being a “**Chief Faculty Mentor**” of ‘**E–Cell’** since last 9 years, responsible for conducting various social/innovative events like: **TEDx (07 Times in a row), E – Conclave, Wonders of Women, Hackathon, B-Plan, Smart India Hackathon** etc.
* Supervising **06** “**Ph.D. Research Scholars**” and 05 Research Scholars completed their PhD under me.
* Being a “**Zonal Lead**” of Bihar & Jharkhand Team, responsible for bringing admissions for GLA University since 2013.
* Working as ‘**Chess Club President’** since its inception (2011)

# Research Credentials

## Research Outreach

|  |  |  |  |
| --- | --- | --- | --- |
| **Total citations** | **h-index** | **i-10 Index** | **Scopus Index** |
| 188 | 06 | 02 | 78 |

**Patents**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr.**  **No.** | **Title** | **Application Number** | **Status** |
| 1. | Smart Bird | 201911052365 | Granted (29 Jan, 2021) |
| 2. | Weight Automatic Key | 201911052366 | Published (31 July, 2021) |
| 3. | Medi Ambulance | 202011015677 | FER (20 Nov, 2020) |
| 4. | A Smart Wheel Chair | 202011037416 | FER (6 Sept, 2021) |
| 5. | An Adapter based on thermoelectric generator | 201911008894 | FER(18 Oct, 2021) |
| 6. | A method for detection and Tracking of objects in Crowded Scene | 201811000903 | Published (28 Dec, 2018) |
| 7. | System and Method for high level home security | 201911014802 | Published (28 June, 2019) |
| 8. | Nirbhaya App (SYSTEM TO SEND EMERGENCY DISTRESS SIGNAL) | 202111016309 | FER (14 Feb, 2022) |
| 9. | Smart Electric Board for Legacy Devices (Smart IoT Board) | 202111035118 | Published (12 Nov, 2021) |

**Papers**

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| --- | --- | --- | --- |
| **Journal**  **(SCI)** | **Journal (Scopus/ESI)** | **Conference** | **Total** |
| **29** | **19** | **36** | **84** |

**Journal**

**SCI**

1. Kumar, M et.al, “Revolutionizing anomaly detection: a hybrid framework for anomaly detection integrating isolation forest, autoencoder, and Conv. LSTM” *Knowledge and Information Systems* Accepted
2. Enhancing Densenet Networks for Improved Forensic Image Analysis and Tampered Image Detection,” *Journal of Forensic Science* “Accepted
3. Singh, U., Rathor, S. & Kumar, M.,” **Detecting and localizing multiple forgeries with TransGAN***”. Iran Journal of Computer Science* Sci (2025).
4. Singh U, Rathor S, Kumar M., “**Advanced framework for multilevel detection of digital video forgeries**. *Annals of the New York Academy of Sciences*. 2025 Jan;1543(1):180-193.
5. Verma, S., Kumar, M.,” **A hybrid machine learning model for skin disease classification using discrete wavelet transform and gray level co-occurrence matrix (GLCM)**. *Multimedia Tools Appl 84*, 12835–12853 (2025)
6. Jain, A., Raja, R., Kumar, M., & Verma, P. K. (2025). **A novel classification of meditation techniques via optimized chi-squared 1D-CNN method based on complexity, continuity and connectivity features**. Connection Science.
7. Upasana Singh, Sandeep Rathor, Manoj Kumar, "**Detecting sequential video forgery using spatiotemporal attention mechanisms**," *Journal of Electronic Imaging*. 33(6) 063042 (6 December, 2024). [SCI-1.0]
8. Singh, U., Rathor, S. & Kumar, M. “**Hybrid deep learning and machine learning approach for detecting spatial and temporal forgeries in videos**”. *Neural Computing & Application* (2024)
9. Kumar, M., Shekhar, S., “**XVC scheme-based secret sharing model with hybrid optimization algorithm for visual cryptography**” SIViP 18 (Suppl 1), 309–323 (2024).
10. Verma, S., Kumar, M.,” **A hybrid machine learning model for skin disease classification using discrete wavelet transform and gray level co-occurrence matrix (GLCM)**.” *Multimedia Tools Appl* (2024). https://doi.org/10.1007/s11042-024-19449-5
11. Singh, A., Kumar, M.,” **Bayesian fuzzy clustering and deep CNN-based automatic video summarization**.” *Multimedia Tools Appl* 83, 963–1000 (2024)
12. Sharma, P., Kumar, M. & Sharma, A.,” **Machine learning based file type classifier designing in IoT cloud**.” *Cluster Computing*, 27, 109–117 (2024).
13. Verma, G., Kumar, M. & Raikwar, S., “**F2UIE: feature transfer-based underwater image enhancement using multi-stackcnn**.” *Multimedia Tools Appl* 83, 50111–50132 (2024)
14. Singh, Juginder Pal, and Manoj Kumar. "**Chaotic whale-atom search optimization-based deep stacked auto encoder for crowd behaviour recognition***." Journal of Experimental & Theoretical Artificial Intelligence*” Vol.-36 No.2 (2024): 187-211.**Impact Factor 2.11 [SCI]**
15. M. Kumar et. al, “**Optimized convolutional neural network for land cover classification via improved lion algorithm**” *Transaction in GIS*, Volume 28, Issue 4, pp. 769-789 (2024) Impact Factor [SCI]
16. Singh, J.P., Kumar, M., “**Conditional autoregressive-tunicate swarm algorithm based generative adversarial network for violent crowd behavior recognition**, “*Artificial Intelligence*, Rev 56 (Suppl 2), 2099–2123 (2023)
17. Kumar, M, et al. "**ECG-based heartbeat classification using exponential-political optimizer trained deep learning for arrhythmia detection**." *Biomedical Signal Processing and Control* 84 (2023): 104816.
18. M. Kumar et. al, “**Detecting Oral Cancer: The Potential of Artificial Intelligence**” *Current Medical Imaging*, Volume 18, Issue 9, pp. 919-923 (2022) **Impact Factor 1.315[SCI]**
19. Verma, G, Kumar, M., “**FCNN: fusion-based underwater image enhancement using multilayer convolution neural network**” *Journal of Electronic Imaging*, Volume 31(6), Issue 6, pp. 063039-2 (2022) **Impact Factor 0.945[SCI]**
20. Verma, G, Kumar, M., “**Systematic review and analysis on underwater image enhancement methods, datasets, and evaluation metrics**” *Journal of Electronic Imaging*, Volume 31(6), Issue 6, pp. 060901-2 (2022) **Impact Factor 0.945[SCI]**
21. Vats, R., Kumar, M., Rai, R. and Verma, G., “**Comprehensive review and analysis on facial emotion recognition methods**,” *Journal of Electronic Imaging*, 32(4), pp.040901-040901. (2023)
22. Singh, J.P., Kumar, M. “**Chronological ant lion optimizer-based deep convolutional neural network for panic behavior detection in crowded scenes**.” *Multimedia Tools Applications*(2023). **Impact Factor [SCI]**
23. Choudhary, Arvind Singh, and Manoj Kumar. “**Competitive Swarm Improved Invasive Weed Optimization-Based Secret Sharing Scheme for Visual Cryptography**.” *Cybernetics and Systems* (2022): 1-19. **Impact Factor [SCI]**
24. M. Kumar et.al., “**Review and Analysis of Underwater Image Enhancement Methods**”, *Multimedia Tools and Applications*, Accepted for publication. **Impact Factor 2.75[SCI]**
25. M. Kumar et.al., “**Room Layout Estimation in Indoor Environment: A Survey**”, *Multimedia Tools and Applications*, Volume 81, Issue 2, Pages 1921 – 1951January 2022. **Impact Factor 2.75[SCI]**
26. M. Kumar, “**Optimal Query Norm Distance and Motion Sketch Based Crowd Video Retrieval**”, *Journal of Engineering Research, Springer*, Accepted for publication.

**Impact Factor 1.541**[**SCI]**

1. M. Kumar and C. Bhatnagar, “**Hybrid tracking model and GSLM based neural network for crowd behavior recognition**”, *Journal of Central South University*, Vol. 24, No. 9, pp. 2071-2081, 2017. Impact Factor [**SCI]**
2. M. Kumar and C. Bhatnagar, “**Zero-stopping constraint-based hybrid tracking model for dynamic and high dense crowd videos**” *Imaging Science Journal*, Vol. 65, No. 2, pp. 75-86, 2017. Impact Factor [**SCI**]
3. M. Kumar and C. Bhatnagar, “**Crowd Behavior Recognition Using Hybrid Tracking Model and Genetic Algorithm Enabled Neural Network**” *International Journal of Computational Intelligence Systems*, Vol. 10, No. 4, pp. 234–246 ,2017. Impact Factor [**SCI**]

**Scopus**

1. Darbari, P., Agarwal, A., & Kumar, M. (2025). **SIF: Satellite Image Fusion for Deforestation Analysis in the Amazon Using S-1 and S-2 Data for LULC Applications**. *Journal of Environmental & Earth Sciences*, 7(6), 23–45.
2. P. Darbari, Ankush Agarwal, and Manoj Kumar, “**SiM: Satellite Image Mixed Pixel Deforestation Analysis in Optical Satellite for Land Use Land Cover Application**”, *J. of Environ. & Earth Science; Earth*. Sci., vol. 7, no. 2, pp. 228–247, Feb. 2025.
3. Narendra Mohan, Manoj Kumar,” **Deep ConvBi-LSTM: A Robust 3D Room Layout Estimation Model for Indoor Environment**” *International Journal of Communication Networks and Information Security*, 2024, 16(4), ISSN: 2073-607X, 2076-0930
4. Verma, S., Kumar, M., “**Automatic Classification of Melanoma Using Grab-Cut Segmentation & Convolutional Neural Network***. SN COMPUT.* SCI. 5, 591 (2024)
5. M. Kumar et. Al., “**Cloud Task Scheduling using Static Time Quantum Approach***” Indian Journal of Computer Science and Engineering (IJCSE)*, Vol. 13 No. 5 Sep-Oct 2022.
6. M. Kumar et. Al., “**Effective Secret Image Sharing using Enhanced Chinese Remainder Theorem**” *‘International Journal of Intelligent Engineering and Systems*, Volume 15, Issue 3, Pages 335 – 342, June 2022.
7. M. Kumar et. Al., “**A Deep Learning Approach for the early Diagnosis of Parkinson’s Disease using Brain MRI Scans**”, *International Journal of Applied Pattern Recognition* (IJARR), Accepted for Publication.
8. M. Kumar et. al., “**The intelligent agent-based information security model for cloud**”, *International Journal of Advance Research, Ideas and Innovations in Technology* (IJARIIT), Vol. 7, Issue 3, pp. 38-45, 2021.
9. Sharma, A., Kumar, M. (2021). **Feature Selection and Classification Based on Swarm Intelligence Approach to Detect Malware in Android Platform**. In: Smart Innovations in Communication and Computational Sciences. *Advances in Intelligent Systems and Computing*, vol 1168. Springer, Singapore.
10. M. Kumar et. Al. “**Scientific Exploration for Density Estimation and Crowd Counting of Crowded Scene**”, *International Virtual Conference on Bridging Innovative Trends in Mathematics, Engineering & Technology* (BITMET 2020), 18-19 December 2020, Coimbatore, India.
11. M. Kumar et. Al., “**A novel medical image retrieval based on deep convolutional neural network and supervised hashing**”, *Journal of Advanced Research in Dynamical and Control Systems* (JARDCS), Vol. 8, Issue 11, pp. 208-214, 2019.
12. M. Kumar et. Al., “**RSWECNN: Refined semantic weight based convolutional neural network (WECNN) segmentation for fruit flower detection**”, *Journal of Advanced Research in Dynamical and Control Systems* (JARDCS), Vol. 8, Issue 11, pp. 189-198, 2019.
13. M. Kumar et. Al., “**Energy efficient and optimal packet size-based routing for WSN using hybrid K-means and ant lion optimization**”, *Journal of Advanced Research in Dynamical and Control Systems* (JARDCS), Vol. 8, Issue 11, pp. 176-182, 2019.
14. M. Kumar et. Al., “**Optimized cluster head and secret key comparison based secure routing in WSN**”, *Journal of Advanced Research in Dynamical and Control Systems* (JARDCS), Vol. 8, Issue 11, pp. 183-188, 2019.
15. M. Kumar et. Al., “**Energy Efficient Video Surveillance Approach for Multiple Camera in Wireless Sensor Networks**”, *International Journal of Innovative Technology and Exploring Engineering (IJITEE)* ISSN: 2278-3075, Volume-8 Issue-8, June 2019.
16. M. Kumar et. Al., “**Discriminative patterns-based online sequential extreme learning machine (DPOS-ELM) for prediction framework**”, *Journal of Advanced Research in Dynamical and Control Systems* (JARDCS), Vol. 11, Special Issue 11, pp. 244-251, 2019.
17. M. Kumar et. Al., “**A Context Based Tracking for Similar and Deformable Objects**”, *International Journal of Computer Vision and Image Processing* (IJCVIP), Vol. 8, No. 4, pp. 1-15, 2018.
18. Kumar Manoj et.al: Published a paper titled” **A Density Based Algorithm for Discovering Density Varied Clusters in Large Spatial Databases**” *International Journal of Computer Application* (IJCA), (0975 – 8887), Vol. 3, No. 6, pp. 01-04, 2010.

**Conferences**

1. Mohan, Narendra, and Manoj Kumar. "**Tuned YOLOv4 Model for Indoor 3D Object Detection from Point Cloud Data**." 2025 International Conference on Intelligent Computing and Control Systems (ICICCS). IEEE, 2025.
2. Narendra Mohan, Manoj Kumar, “**Deep Learning-based 3d Room Layout Prediction with ConvbiSTM Models**”, International Conference on Visual Analytics and Data Visualization (ICVADV-2025) at Francis Xavier Engineering College, Tirunelveli, India. 4-6 Mar, 2025.
3. S. Verma, A. Kumar and M. Kumar, "**Skin disease detection using Decision Tree and Support Vector Machine**" 2024 1st International Conference on Advanced Computing and Emerging Technologies (ACET), Ghaziabad, India**, 2024**, pp. 1-6
4. S. Verma, A. Kumar and M. Kumar, "**A Review on Deep Learning Techniques for skin disease Detection**," 2024 1st International Conference on Advanced Computing and Emerging Technologies (ACET), Ghaziabad, India, **2024**, pp. 1-6
5. M. Kumar,” **A modified residual u-net architecture for skin cancer image segmentation:**

**Multiresunet**” participated in Second International Conference on Pervasive Computing Advances and Applications (PerCAA- 2024) held on October 18 - 19, **2024**, organized by Poornima College of Engineering, Jaipur, Rajasthan, India.

1. Singh, Upasana, Sandeep Rathor, and Manoj Kumar. "Deep video forensics: unveiling spatial forgery detection with modified ResNet50." In 2024 IEEE 13th International Conference on Communication Systems and Network Technologies (CSNT), pp. 260-265. IEEE, 2024.
2. D. Bhardwaj and M. Kumar, "Evolution of impact of Social media using the COPRAS Method," 2023 1st International Conference on Cognitive Computing and Engineering Education (ICCCEE), Pune, India, **2023**, pp. 1-5.
3. Singh, Anshy, Manoj Kumar, and Aditi Saxena. "Utilization of Data Analytics in Analyzing Audio and Crowd Video Content." In 2023 9th International Conference on Advanced Computing and Communication Systems (ICACCS), vol. 1, pp. 808-812. IEEE, 2023.
4. D. K. Sharma and M. Kumar, "Market Segment Evaluation and Selection by Grey Relational Analysis," 2023 1st International Conference on Cognitive Computing and Engineering Education (ICCCEE), Pune, India, 2023, pp. 1-5.
5. P. Pathak and M. Kumar, "Environmental Impact Assessment Analysis using Demetal method," 2023 1st International Conference on Cognitive Computing and Engineering Education (ICCCEE), Pune, India, 2023, pp. 1-5,
6. Verma, Gunjan, and Manoj Kumar. "Under-water image enhancement algorithms: A review." AIP Conference Proceedings. Vol. 2721. No. 1. AIP Publishing, 2023.
7. Kumar, M, et al. "Enhancing medical field with e-health and AI: A systematic review." AIP Conference Proceedings. Vol. 2721. No. 1. AIP Publishing, 2023.
8. Sharma, Puneet, Manoj Kumar, and Ashish Sharma. "Task balancing approaches in cloud computing environment: A survey." AIP Conference Proceedings. Vol. 2721. No. 1. AIP Publishing, 2023.
9. R. Agrawal and M. Kumar, "Deep Learning Framework for Banana Shelf Life Classification based on Ripening: BSLC," 2023 6th International Conference on Information Systems and Computer Networks (ISCON), Mathura, India, 2023, pp. 1-5.
10. A. Singh and M. Kumar, "Exploring the Techniques for Crowd Video Summarization: A Comprehensive Survey," 2023 6th International Conference on Information Systems and Computer Networks (ISCON), Mathura, India, 2023, pp. 1-6.
11. A. Singh, M. Kumar and A. Saxena, "Analysis of Computer Vision for Graphics and Animation," 2023 9th International Conference on Advanced Computing and Communication Systems (ICACCS), Coimbatore, India, 2023, pp. 804-807.
12. A. Singh, M. Kumar and A. Saxena, "Utilization of Data Analytics in Analyzing Audio and Crowd Video Content," 2023 9th International Conference on Advanced Computing and Communication Systems (ICACCS), Coimbatore, India, 2023, pp. 808-812.
13. Verma, G., Kumar, M., Raikwar, S. (2023). Single Under-Water Image Enhancement Using the Modified Transmission Map and Background Light Estimation. In: Kumar Singh, K., Bajpai, M.K., Sheikh Akbari, A. (eds) Machine Vision and Augmented Intelligence. Lecture Notes in Electrical Engineering, vol 1007. Springer, Singapore.
14. Manoj Kumar et.al: Presented a Paper titled “Satellite Image Enhancement Techniques: A Comprehensive Review” Volume 435, Pages 431 – 4472022 *2nd International Conference on Communication and Artificial Intelligence*, ICCAI 2021, November 2021.
15. Manoj Kumar et.al: Presented a paper titled “Scientific Exploration for Density Estimation and Crowd Counting of Crowded Scene”, *‘International Virtual Conference on Bridging Innovative Trends in Mathematics, Engineering & Technology’* (BITMET-2020), Volume 1947, Issue 19 August 2021, Coimbatore.
16. Manoj Kumar et.al: Presented a Paper titled “*Covid-19 and Artificial Intelligence: Potential and Challenges*” 5th International Conference on Information Systems and Computer Networks, ISCON 2021, Mathura22 October 2021 through 23 October 2021Code 177293.
17. Manoj Kumar et.al: Presented a paper titled “An Optimal Approach to Detect the Human Heads using H-MTF in Crowded Scenes.”, *‘Women Researchers in Electronics and Computing’* (WREC-2021), National Institute of Technology, Jalandhar, India, April 22-24, 2021.
18. J. P. Singh, D. Srivastava and M. Kumar, "Predicting Diabetes Mellitus Using Machine Learning Algorithms," 2021 5th International Conference on Information Systems and Computer Networks (ISCON), Mathura, India, 2021, pp. 1-4.
19. Manoj Kumar et.al: Presented a paper titled ““DRO based approach for Symmetric

Encryption-Decryption of Digital Images””, *International Conference on IoT, Social, Mobile, Analytic and Cloud in Computer Vision and Bio Engineering* (ISMAV-CVB-2020), St Mother Teresa Engineering College, Thoothukudi, Tamilnadu, Oct 29-30, 2020.

1. Manoj Kumar et.al: Presented a paper titled “Motion Pattern Recognition from Crowded Video”, *International Conference on Reliability, Infocom Technologies, and Optimization* (ICRITO-2020), Amity University, Uttar Pradesh, June 04 – 05, 2020.
2. Manoj Kumar et.al: Presented a paper titled “Content Aware Image Size Reduction using Low Energy Maps for Reduced Distortion”, *International Conference on Computer Vision and Image Processing* (CVIP-2016), IIT Roorkee, February 26 – 28, 2016.
3. Kumar Manoj et.al: “An Economic allocation of resources in Grid environment.” *Information Systems and Computer Networks (ISCON), International IEEE Conference*, at GLA University, 2013.
4. M. Kumar and A. Sharma, "Mining of data stream using “DDenStream” clustering algorithm," 2013 IEEE International Conference in MOOC, Innovation and Technology in Education (MITE), Jaipur, India, 2013, pp. 315-320
5. Kumar Manoj et.al: Presented a Paper Titled “A Reduced Time Complexity Techniques for Finding Frequent Item Sets” *International Conference at IMT*, Ghaziabad, 8-9 Feb, 2008.
6. Kumar Manoj et.al: Presented a Paper Titled “N- Apriori Algorithm for finding Frequent Item Sets in Relational Databases *at ABES, Ghaziabad*, 10-11 Feb, 2008.
7. Kumar Manoj et.al: Presented a Paper Titled “An Introductory Concepts of Fuzzy Systems” *at GLAITM, Mathura*, 21-22 Feb, 2008.
8. Kumar Manoj et.al: Presented a paper on “Survey of Parallel Association Rule Mining” 14-15 March 2008 *at SIT, Barabanki*.
9. Kumar Manoj, et.al: Presented a paper Titled “Application of Mathematical Tools for DNA Computing” *at GLAITM, Mathura*, 21-22 Feb.2010.
10. Kumar Manoj, et.al: Presented a paper Titled “Throughout Prospect of Handoff Techniques in Wireless Mobile Networks” *at GLAITM, Mathura*, 21-22 Feb.2010.
11. Kumar Manoj, et.al: Presented a paper Titled “Measuring the Performance of Call Admission Control in Two Tier Wireless Cellular Communication Networks with Prioritization to the Handoff Calls” *at HCST, Mathura*, 11-12 Mar.2010.
12. Kumar Manoj, et.al: Presented a paper Titled “An Approach towards the solution of Minimum Vertex Cover Problem” *at HCST, Mathura*, 11-12 Mar.2010.

**Projects:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No.** | **Project Title** | **Issuing Authority** | **Amount (Cr.)** | **Time Period** |
| 1. | NewGen Innovation & Entrepreneurship Development Centre | DST, Govt. of India | 2.87 Cr | 2017-22 |
| 2. | National Implementing & Monitoring Agency for Training | DST, Govt. of India | 16 Lacs | 2018-19 |
| 3. | National Implementing & Monitoring Agency for Training | DST, Govt. of India | 08 Lacs | 2019-20 |
| 4. | TBI- GLAU | Ministry of IT & Electronics, Govt. of Uttar Pradesh | 5.50 Cr | 2021-26 |
| 5. | STI Based Training | SERB, DST | 5.20 Lacs | 2022-23 |
| 6. | MSME Incubation Center | MSME, Govt. of India | 01 Cr | 2022-23 |
| 7. | SISFS (Startup India Scheme) | Ministry of Commerce & Industry | 2.10 Cr | 2023-26 |
| 8. | GENESIS, Gen-Next Support for Innovative Startups | Ministry of Electronics and Information Technology | Up to 8Cr | 2023-24 |

**PhD Thesis Supervised**

* + Awarded/ Completed : 08
  + Working : 03

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr.**  **No.** | **Name of Students** | **Title of Thesis/Research Area** | **Status** |
| 1. | Arvind Chaudhary | Visual Cryptography | Completed |
| 2. | Joginder P Singh | Crowd Behaviour Analysis | Completed |
| 3. | Narendra Mohan | Layout estimation of Indoor Images | Pursuing |
| 4. | Anshy Singh | Crowd Video Summarization | Completed |
| 5. | Gunjan Verma | Underwater Image Enhancement | Completed |
| 6. | Sarvachan Verma | Skin Disease Analysis | Completed |
| 7. | Puneet Sharma | Cloud Image Analysis | Completed |
| 8. | Priyanka Darbari | Satellite Image Enhancement | Completed |
| 9. | Upasana Singh | Image Forgery (Social Sites) | Completed |
| 10 | Rahul Agarwal | Fruits Shelf Life Prediction | Pursuing |
| 11 | Vibhuati Sharan | Underwater Image Enhancement | Pursuing |

**Postgraduate Thesis Supervised**

* + Completed/ Awarded : 09
  + Working : 00

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Name of Student** | **Title of thesis** | **Year** |
| 1. | Hari Om Sharan | DNA Computing: A novel approach towards the solution of NPC Problem | 2009 |
| 2. | Vikas Solanki | Vertex Problem | 2009 |
| 3. | Deeksha Garg | Clustering Uncertain Data Stream Using Thresholding | 2014 |
| 4. | Bhawana Kaushik | Tracking Dancers with Similar Appearance | 2015 |
| 5. | Chhaya Agrawal | Group Detection in TV Shows using Upper Body | 2015 |
| 6. | Upasana Singh | Motion Pattern Recognition from Crowded Video | 2018 |
| 7. | Rishabh Vats | Emotion Detection | 2020 |
| 8. | Akashansha Bansal | Head Detection in Crowded Scene | 2021 |
| 9. | Rahul Agarwal | Banana Shelf Life Detection | 2023 |

**Membership of professional bodies**

* + Life Time Member of CSI [Membership No. 00125592]
  + IEEE Member [Membership No.- 97004194]

**Academic/Administrative Responsibility**

* Working as **OSD (Admin) GGV, University** from 13 Jan, 2025 at GGV, Bilaspur
* Working as **Nodal Officer, Office of International Affairs**, GGV Bilaspur, from 07 Feb, 2005 to till date
* Worked as **Member** to prepare a draft proposal to start Executive Development Program under Skill Development Cell from 13 Jan, 2025 at GGV, Bilaspur.
* Working as **Technical Committee Member** of ICT Infrastructure Center from 14 Oct, 2024 at GGV, Bilaspur.
* Working as **Academic Council Member** of GGV from 14 Oct, 2024 at GGV, Bilaspur.
* Working as **Technical Committee Member** of Internet Leased Connection from 07 Oct, 2024 at GGV, Bilaspur.
* Working as **Head of the Department**, Information Technology from **05 Oct, 2024** to till date…
* Working as **Associate Nodal Officer** of Skill Development Cell from 28 March, 2024 at GGV, Bilaspur.
* **Feb 2022 to 05 Dec, 2023**: worked as **Associate Director “Technology Business Incubator” (TBI)** Section-8 Company “**SPAKLE GLAM TBI FOUNDATION**.
* **July 2018 to 2020:** Worked as a **“Chief – Coordinator of NIMAT – Program”**, sponsored by NSTEDB, DST, Govt. of India, implementing agency EDII, Ahmadabad, at GLA University, Mathura.
* **July 2017 to 05 Dec, 2023:** Worked as a **“Chief – Coordinator of NewGen IEDC”** sponsored by NSTEDB, DST, Govt. of India, at GLA University, Mathura.
* **July 2015 to 05 Dec, 2023:** Worked as a “**Chief Faculty Mentor at Entrepreneurship Cell”** GLA University, Mathura.
* **April 2008 to March 2012:** Worked as a **“Program Coordinator”** of Computer Science & Engineering & Information Technology at GLA University, Mathura.
* Served as “**Subject Head/Mentor”** of Computer Organization, Advance Computer Architecture, Cryptography & Network Security, Data Mining, Operation Research & Optimization, many times at GLA University, Mathura.
* **August 2012**: Established “Mission 10x Learning Center (MTLC)” at **GLA University, Mathura**, sponsored by **Wipro Technologies**, **Bengaluru.**
* **July 2009:** Started **ABACUS Society,** in the Computer Engineering & Applications Department at GLA University, Mathura.
* **July 2011 to 06 Dec 2023:** Worked as a “**President**” of **Chess Club** at GLA University, Mathura.
* **July 2005 to July 2008**: Worked as a **“Presiding Officer”** of Uttar Pradesh Technical University for conducting entrance test.
* Worked as Departmental Examination In-charge.
* Worked as a Member of UPTU Counselling.
* Worked as a Proctorial Board Member.

**Patent: 09**

* Dec 2018: Published a Patent Tiled “A method and system for automatically detecting and tracking of a human object from a crowd using Zero-stopping Constraint model”
* One Patent filed Titled as “System and Method for high level home security”

**Book Published/Reviewed**

* Two text books on ITIM (Pearson Education) & Discrete Mathematical Structure.
* Four McGraw-Hill Books on Computer Architecture and Organization has been reviewed.

**Session Chair/Co-chair in International/National Conferences**

* Invited as Resource Person in the Five-Day Faculty Development Program on “Connecting Theory and Emerging Research with Applied Technologies”, from 22nd July 2024 to 26th July 2024, organized by Amity School of Engineering & Technology, Amity University, Patna. **[2024]**
* Invited as Resource Person at Short-Term Training Program (STTP) focusing on "Concepts of Artificial Intelligence and Machine Learning and their Applications. Organized by Department of CSE, RCERT, Chandrapur, Maharashtra on 07 Feb, 2024. **[2024]**
* Invited as Speaker on the Topic “NEP Process” on 22 Jan, 2022 organized by SJC Institute of Technology Chickballapur, Karnataka. [**2022**]
* Invited as Speaker on the Topic “Innovation Practices” on 11 May, 2021 organized by “Research and Innovation Cell” Vision Institute of Technology, Kanpur. [**2021**]
* Participated as Technical Committee Member in the IEEE IAS 5th IEEE International Conference on Computing, Power and Communication Technologies (GUCON-2022) which to be held during September 23-25,2022, at India Habitat Centre, Lodhi Road, New Delhi, India. **[2022]**
* Participated in the regional meet held on 22 Aug 29, 2022 at Dr. A. P. J. Abdul Kalam Technical University, Lucknow. **[2022]**
* Invited as Speaker and Judge evaluation for best innovative ideas for 75th Azadi

ka Amrit Mahotsav, Innovative Bharat 2022 held on September 18, 2022 at BSA College of Engineering & Technology, Mathura. **[2022]**

* Delivered Invited Lecture on “INCUBATION- OPPORTUNITIES FOR STUDENTS AND FACULTIES” for Sri Eshwar College of Engineering, Coimbatore – 641202 on 25 Feb, 2023. **[2023]**
* Session Chaired in the ICCAI-2021, International Conference on Communication and Artificial Intelligence, GLA University held during 19-20 November, 2021. **[2021]**
* Delivered expert lecture on Technology and Innovations on November 04, 2019 under TEQIP-III Project, MHRD, India organized by Engineering College, Bharatpur, Rajasthan. **[2019]**
* Session Chaired in the 4th International Conference on Communication and Cyber-Physical Engineering (ICCCE-2021) Hyderabad, India April 9-10, 2021. **[2021]**
* Invited as Resource Person at Six Days Faculty Development Program titled "Art of Quality and Effective Research “on Oct 1 to Oct 06, 2020 by Department of CSE, GLA University, Mathura. **[2020]**

**Workshop & Conference Attended**

* Successfully participated in an online Three-Day Faculty Development Programme on “Citation & Reference Management for Scholarly Writing” organized by IQAC, NSB Bangalore in collaboration with Mendeley, Netherlands, between 26th and 28th of February, **[2024]**
* Successfully completed **Innovation Ambassador training (Foundation Level)** conducted by **MoE's Innovation Cell & AICTE during** the period from 30th June - 30th July 2021. **[2021]**
* Successfully participated in **Three Days** International Conference on **“Women Researchers in Electronics and Computing”** Organized by Dr B R Ambedkar National Institute of Technology, Jalandhar, India, during April 22-24, 2021. **[2021]**
* Successfully completed **Five Days** training on **“Virtual Trainers’ Training Programme on Entrepreneurship”** from 04 to 08 January, 2021by EDII, Ahmedabad. **[2021]**
* Successfully participated in **Five Days** Faculty Development Program on “Computer Vision and Image Processing” jointly organized by Electronics and ICT Academy, IIT Roorkee & WCVIP, IIT Roorkee from 14 Dec to 24 Dec, 2020. **[2020]**
* Successfully participated in ‘Basic Series” of the Web of Science Training & Certificate Program 2020 on 07 Sept. **[2020]**
* Successfully attended Webinar on “Basics of Polymer Photovoltaics” on 26 Aug, 2020 Organized by Eshwar College of Engineering, Coimbatore. **[2020]**
* Successfully attended Webinar on “Rural Development with People Participation” on 25 Aug, 2020 Organized by Eshwar College of Engineering, Coimbatore. **[2020]**
* Successfully attended Webinar on “Essentials of Electric Vehicles” on 19 Aug, 2020 Organized by Eshwar College of Engineering, Coimbatore. **[2020]**
* Successfully attended Webinar on “Introduction to Polymers” on 18 Aug, 2020 Organized by Eshwar College of Engineering, Coimbatore. **[2020]**
* Successfully attended Webinar on “Enhancing Customer Experience using AI” on 13 Aug, 2020 Organized by Eshwar College of Engineering, Coimbatore. **[2020]**
* Successfully attended Webinar on “Digital Business Leadership” on 31 July, 2020 Organized by Eshwar College of Engineering, Coimbatore. **[2020]**
* Successfully attended Webinar on “Innovative Practices: Insights and Tends” organized by IEEE Student Chapter MJP Rohilkhand and IIC on 31 July. **[2020]**
* Successfully attended Webinar on “Principles of Research Writing and Scholarly communications” organized by Author Cafe in association with Dean R&D GLA University, Mathura on 29 July. **[2020]**
* Successfully participated in **Three Days** International Conference on “**Digital Democracy –IT for Change**” from 16 to 18 January, 2020 at KIIT, Bhubaneswar organized by the Computer Society of India. **[2020]**
* Participated in One Day Faculty Development Program on “**Applications of Fuzzy Set in Industry**” on 19 October, 2019 organized by GLA University, Mathura. **[2019]**
* Successfully organized **Two Days** International Conference on “**Information Systems and Computer Networks**” from Nov 21-22, 2019 at GLA University, Mathura. **[2019]**
* Successfully participated in **Two days’** workshop on “**Incubation Center Master-Class** “held at SP-IBI, Mumbai from 27 to 28 Sept, 2018. **[2018]**
* Successfully completed **Three Months** Certificate program in “**Accreditation for Entrepreneurship Educators & Mentors (AEEM)** jointly offered by EDII, Ahmedabad & AIMA, and New Delhi from Dec 04, 2017 to Feb 27, 2018. **[2018]**
* Successfully completed **Two Weeks** training on **“Faculty Development on Entrepreneurship”** from 18 to 30 December, 2017 at KIET Group of Institutions, Ghaziabad. **[2017]**
* Successfully completed **Five Days** training on **“Startup Enablers Training Series-Professional Course Level 1”** from 23 to 27 January, 2017 at IIIT Hyderabad. **[2017]**
* Successfully completed **Three days’** workshop on “**Incubation of Incubators**” Sponsored by MSME, Govt. of India during 15-17 June 2016 at Lonavala, Pune. **[2016]**
* Participated in one day “**Bluemix Enablement**” session sponsored by “**IBM**” on 20 Nov, 2015. **[2015]**
* Successfully completed **Two days’** workshop on “**Garuda: Grid”** conducted by CDAC, at Pune during Aug 07 to 08, 2012. **[2012]**
* Successfully completed **Two days’** workshop on “**Theory of Computation**” AICTE Sponsored during 13-14 Feb 2010 at G.L.A. Group of Institutions, Mathura. **[2010]**
* Successfully completed **Two days’** post workshop by “**WIPRO Mission 10X”** during 29th to 30th April 2009 at G.L.A. Group of Institutions, Mathura. **[2009]**
* Successfully completed **Five days’** workshop by WIPRO Mission 10X on **“High Impact Teaching Skills”** during 16th to 20th Feb 2009 at G.L.A. Group of Institutions, Mathura. **[2009]**
* Successfully completed **Two days’** workshop on **“Change Management”** by Mr. Ashok Mehra, Global Head- Change Management, and TCS during 27 to 28 Dec, 2008 at G.L.A. Group of Institutions, Mathura. **[2008]**
* Successfully completed **Five days** FDP program under Technical Education Quality Improvement Program (TEQIP) sponsored by World Bank on **“Network Administration & Information Security”** during 5th Nov 2008 to 9th Nov 2008 at HBTI, Kanpur. **[2008]**
* Successfully completed **Three days** FDP **“IBM Faculty Enablement Program 2008**” by IBM on “SOA & Web 2.0” during May, 2008 at UPTU, Noida Centre, and Noida (U.P.). **[2008]**
* Attended **Two Days** National Seminar on **“Micro Enterprise Management”** during 25th August to 26th August 2007 at G.L.A. Institute of Business Management, Mathura. **[2007]**
* Successfully completed four days’ workshop on “**Rational Rose”** sponsored by IBM during 20th march 2006 to 23rd march 2006 at G.L.A. I.T.M., Mathura. **[2006]**
* Successfully completed three days’ workshop on “**Linux”** from 18th may 2005 to 20th may 2005 at G.L.A. I.T.M., Mathura. **[2005]**
* Successfully completed **Five Days** Faculty training program on **“.Net Technology using C#”** from 5th July 2004 to 09th July 2004 at G.L.A. Institute of Technology & Management, Mathura Sponsored by Microsoft. **[2004]**
* Successfully completed a T**hree days’** workshop as a part of **Samridhi Partnership Program** jointly conducted by **Microsoft & NIIT, Mathura** on **“.Net Technology Appreciation Program”** in Mar, 2004 at NIIT, Mathura. **[2004]**

**NIMAT (National Implementing Agency for Training, DST, Govt. of India Workshop Organized**

* Successfully organized “**Three days EAC”** Entrepreneurship Awareness Campfrom **23 Aug 2018 to 25 Aug 2018,** at Government Leather Institute, Nunihai, Agra under **NIMAT** program sponsored by **NSTEDB, DST, Govt. of India**.
* Successfully organized “**Three days EAC”** Entrepreneurship Awareness Campfrom **10 Jan, 2019 to 12 Jan, 2019,** at Mechanical Department, GLA University, Mathura under **NIMAT** program sponsored by **NSTEDB, DST, Govt. of India**.

**Workshop & Conference Organized**

* Successfully Organized two days “**Smart India Hackathon**” SIH-Nodal Center-2024 at GGV, Bilaspur on 11 & 12 Dec, 2024.
* Successfully organized & participated in a one-day Tutorial/Workshop on **“Cloud Computing and its Virtualization Tools”** by **Gurukul Kangri University, Hardwar** in association with GLA University, Mathura on 28th Feb 2014 at G.L.A. University, Mathura under the flagship of **IEEE sponsored International Conference (ISCON 2014).**
* Successfully organized& participated in a one-day Tutorial/Workshop on **“Distributed Computing via Cloud and Grid” by CDAC, Bengaluru** in association with GLA University, Mathura on 8th March 2013 at G.L.A. University, Mathura under the flagship of **IEEE sponsored International Conference (ISCON 2013).**
* Successfully organized & participated a Two Days’ Workshop on **“3D-Animax “by Robosapiens, Noida** in association with GLAITM, Mathura from 29th August 2010 to 30th August 2010 at G.L.A. Institute of Technology & Management, Mathura. **[2010]**
* Successfully organized & participated a Two Days’ Workshop on **“DB-2 & RAD “by IBM, Pune** in association with GLAITM, Mathura from 20th November 2009 to 21th November 2009 at G.L.A. Institute of Technology & Management, Mathura. (Taken by Mr. Suryakant, Pune) **[2009]**
* Successfully organized & participated a Two Days’ Workshop on **“Adobe Flash “by IIT Guwahati &Kyrion Technologies**, New Delhi in association with GLAITM, Mathura from 29th August 2009 to 30th August 2009 at G.L.A. Institute of Technology & Management, Mathura. **[2009]**
* Successfully organized & participated a Four Days’ Workshop on **“Rapid Application Development (RAD) “by IIT Guwahati &Kyrion Technologies**, New Delhi in association with GLAITM, Mathura from 29th August 2009 to 30th August 2009 at G.L.A. Institute of Technology & Management, Mathura. **[2009]**
* Successfully organized & participated a Three Days’ Workshop on **“Database-2 (DB-2) “by IBM under IBM Excellence Laboratory program**, New Delhi in association with GLAITM, Mathura from 29th August 2009 to 30th August 2009 at G.L.A. Institute of Technology & Management, Mathura. **[2009]**
* Successfully organized & participated a two days’ Workshop on **“Ethical Hacking “by IIT Guwahati & Kyrion Technologies, New Delhi** in association with GLAITM, Mathura from 29th August 2009 to 30th August 2009 at G.L.A. Institute of Technology & Management, Mathura. (By Rishabh Mehta, Sangeet Chopra, Rajat Garg & Tajinder Kalsi) **[2009]**

# Personal Profile

**Father’s Name :**  Shri G. N. Choubey

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**Marital Status :** Married

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