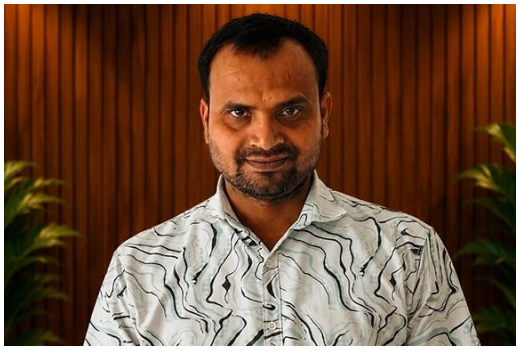

Dr. Sachin Kumar is an academician, presently working as Associate Professor of CSE at IILM University, Gurugram. He has a rich and diverse experience spanning over 10+ years across research, and academia. His primary research interests lie in Machine Learning, Deep Learning & Cloud Computing. As a researcher & author, he has published extensively, contributing to various prestigious journals listed in Scopus & UGC Care; edited & authored multiple book chapters that address image classifications & different energy efficient models and serve as vital resources for students & academicians alike.

Educational Qualification

- Ph.D., Computer Applications, Veer Bahadur Singh Purvanchal University (**NAAC A+ State University-2024**) in 2024, Jaunpur, Uttar Pradesh (2024)
    - Topic: Energy Efficient Model For Cloud Computing (Full Time)
- M.Tech, Computer Science, BabaSaheb Bhimrao Ambedkar University (**NAAC A++ Central University-2023, NIRF-33-2024**), Lucknow, India in 2016. (1st Division)
- B.Tech in Computer Science & Engineering from AKTU (**NAAC A State University**), Lucknow, India in 2011. (1st Division)
- Diploma, Statistics & Computing, Banaras Hindu University (**NAAC A Central University-2024, NIRF-5-2024**), (1st Division).

Research and Scholarly Publication

Research Paper Published		
SN	**TITLE**	**PUBLISHER**
1	**Kumar, S**., Pal, S., Singh, V. P., & Jaiswal, P. (2023**). Energy-efficient model "Inception V3 based on deep convolutional neural network" using cloud platform for detection of COVID-19 infected patients.** *Epidemiologic Methods*, *12*(1), 20210046. **Link:** https://www.degruyter.com/document/doi/10.1515/em-2021-0046/html	EPIDEMIOLOGIC METHODS-2023
2	**Kumar, S**., Pal, S., Singh, V. P., & Jaiswal, P. (2023). **Performance evaluation of ResNet model for classification of tomato plant disease**. *Epidemiologic Methods*, *12*(1), 20210044. Link: https://www.degruyter.com/document/doi/10.1515/em-2021-0044/html	EPIDEMIOLOGIC METHODS-2023
3	**Kumar, S**., Singh, V. P., Pal, S., & Jaiswal, P. (2023). **Energy-efficient model "DenseNet201 based on deep convolutional neural network" using cloud platform for detection of COVID-19 infected patients.** *Epidemiologic Methods*, *12*(1), 20210047. **Link:** https://www.degruyter.com/document/doi/10.1515/em-2021-0047/html?lang=en&srsltid=AfmBOopLDXF66JBzAXsvBUr4Zn7hnWDdA5t2rWdcjhrvJThidSGfKWr-	EPIDEMIOLOGIC METHODS-2023

4	**Kumar, S**., Pal, S., Singh, V. P., & SinghPriya, S. K. S. S. K. (2022). **COVID-19 Disease Detection using Pre-Trained Deep Convolutional Neural Network (GoogleNet) on Cloud Platform.** *NeuroQuantology*, *20*(9), 1989. **Link:** https://www.proquest.com/openview/78cb76965d5cbc493aa4b6a131f2e9a7/1?pq-origsite=gscholar&cbl=2035897	NEUROQUANTOLOGY-2023
5	**Kumar, S**., Shahi, A. K., Patel, K., & Jaiswal, P. (2022). **Energy and Cost Efficient Pre-trained Convolutional Neural Network (ResNet-50) Model for Tomato Disease Recognition Using Cloud Platform**. *NeuroQuantology*, *20*(9), 2009. **Link:** https://www.proquest.com/openview/4032d357f842ef59d2d4dae8cd927fb8/1?pq-origsite=gscholar&cbl=2035897	NEUROQUANTOLOGY-2023
6	**Kumar, S.,** Solanki, S., Srivastav, V., Bhattacharya, A., Roy, P., Laha, S. R., & Nayak, D. S. K. (2025). Boosted Query Expansion for Agricultural Decision Support: A Hybrid Framework Combining Case-Based Reasoning, Fuzzification, and Machine Learning. *Tikrit Journal of Engineering Sciences*, *32*(4), 1-11. **Link:** https://tj-es.com/ojs/index.php/tjes/article/view/2615	Tirkit Journal of Engineering Sciences- 2025
7	Development of a smart greenhouse integrated with advanced technologies for real-time monitoring and automated control of environmental parameters **Link:** https://www.researchgate.net/publication/396334605_Development_of_a_smart_greenhouse_integrated_with_advanced_technologies_for_real-time_monitoring_and_automated_control_of_environmental_parameters	Journal of Dalian University of Technology 2025
8	Kumar, S.,Solanki, S., Verma, S., **A Survey of Techniques for Improving Information Retrieval through Query Expansion.** **Link:** https://www.researchgate.net/profile/Sachin-Kumar-208/publication/390577582_Information_Technology_and_Computer_Science/links/67f4dacb49e91c0feae9f69e/Information-Technology-and-Computer-Science.pdf	International Journal of Information Technology and Computer Science (IJITCS)2025
9	Roy, P., Solanki, S., Kumar, S., Mondal, S., Chakraborty, S., Rajak, B., ... & Biswas, A. (2025). An AI enhanced IoT driven localization system (AIILS) for underground mine environments through implementation of bluetooth low energy (BLE). *Journal of The Institution of Engineers (India): Series D*, 1-19. **LINK:** https://link.springer.com/article/10.1007/s40033-025-00918-6	Journal of The Institution of Engineers (India): Series D (2025)
10	Samriya, J. K., **Kumar, S**., & Singh, S. (2016). **Efficient K-means Clustering for Healthcare Data**. *Advanced Journal of Computer Science and Engineering (AJCST)*, *4*(2), 1-7.	Advanced Journal of Computer

	Link: https://www.researchgate.net/profile/Jitendra-Samriya/publication/330412404_EFFICIENT_K-MEANS_CLUSTERING_FOR_HEALTHCARE_DATA/links/5c3f0cc292851c22a378a523/EFFICIENT-K-MEANS-CLUSTERING-FOR-HEALTHCARE-DATA.pdf	Science and Engineering (AJCST)
11.	Singh, S., **Kumar, S**., & Samriya, J. K. **Efficient Topology based Load balancing for Cloud Infrastructures.** **Link**: https://www.researchgate.net/profile/Jitendra-Samriya/publication/330412470_Efficient_Topology_based_Load_balancing_for_Cloud_Infrastructures/links/5c3f0cfb92851c22a378a53c/Efficient-Topology-based-Load-balancing-for-Cloud-Infrastructures.pdf	Advanced Journal of Computer Science and Engineering (AJCST)
12	Kumar, S., Singh, S., & Samriya, J. K. APPLYING DYNAMIC VOLTAGE FREQUENCY SCALING (DVFS) FOR BALANCING ENERGY IN CLOUD DATACENTERS. Link: https://www.researchgate.net/profile/Jitendra-Samriya/publication/330412561_APPLYING_DYNAMIC_VOLTAGE_FREQUENCY_SCALING_DVFS_FOR_BALANCING_ENERGY_IN_CLOUD_DATACENTERS/links/5c3f0c8a92851c22a378a519/APPLYING-DYNAMIC-VOLTAGE-FREQUENCY-SCALING-DVFS-FOR-BALANCING-ENERGY-IN-CLOUD-DATACENTERS.pdf	Advanced Journal of Computer Science and Engineering (AJCST)
13	Sachin Kumar, Saurabh Pal, Satya Singh, **Energy Efficient Model for Cloud Computing,** The International journal of analytical and experimental modal analysis, Page No: 129-141, ISSN NO:0886-9367, DOI:18.0002.IJAEMA.2022.V14I02.200001.0156859616**.** **Link:** https://drive.google.com/file/d/16p042_AX18JjEhMmqGOwJBdF8BWhirP5/view	IJAEMA-2022
14	Sachin Kumar, Saurabh Pal, Sarika Srivastava, Vijendra Pratap Singh, Priya Jaiswal. **Gold Price Forecasting In India Using Arima Model On Cloud Platform**, International Journal of Creative Research Thoughts (IJCRT), Volume 11, Issue 8 August 2023 | ISSN: 2320-2882, Page No (153-156). **Link:** https://www.researchgate.net/profile/Sachin-Kumar-208/publication/374294241_Gold_Price_Forecasting_In_India_Using_Arima_Model_On_Cloud_Platform/links/6583c7172468df72d3c0cd57/Gold-Price-Forecasting-In-India-Using-Arima-Model-On-Cloud-Platform.pdf?origin=scientificContributions	International Journal of Creative Research Thoughts (IJCRT)-2023
15	Kumar, S., Pandey, A. K., Srivastava, P. K., Sharma, K., Pal, N., & Patidar, P. K. (2025, March). SmartCocoa: Leveraging Deep Learning for Cocoa Leaf Disease Identification. In *International Conference on Computing and Communication Systems for Industrial Applications* (pp. 563-571). Singapore: Springer Nature Singapore. **LINK: https://link.springer.com/chapter/10.1007/978-981-96-8350-5_39**	2026
16	Kumar, S., Sharma, A. K., Srivastava, S., Tiwari, V., Patidar, P. K., & Rai, S. (2025, May). Automated COCOA Disease Detection Using Convolutional Neural Networks: A Case Study of VSD and Other Pathogens. In *Proceedings of the International Conference on Recent Advancement and Modernization in*	RAMSITA-2025

	Sustainable Intelligent Technologies & Applications (RAMSITA-2025) (p. 361). Springer Nature. **LINK:** https://books.google.co.in/books?hl=en&lr=&id=q-RfEQAAQBAJ&oi=fnd&pg=PA361&dq=Automated+COCOA+Disease+Detection+Using+Convolutional+Neural+Networks:+A+Case+Study+of+VSD+and+Other+Pathogens&ots=bPA-PEXN2l&sig=-uDC8vWbXhSTyC5qFPAnJtrX2RA&redir_esc=y#v=onepage&q=Automated%20COCOA%20Disease%20Detection%20Using%20Convolutional%20Neural%20Networks%3A%20A%20Case%20Study%20of%20VSD%20and%20Other%20Pathogens&f=false	
17	Kumar, S., Ranjan, A., Srivastava, P. K., Dewan, A., Patidar, P. K., & Tiwari, V. (2024, November). Optimizing Image Classification with Deep Learning: A Performance-Based Approach. In Proceedings of the 3rd International Conference on Optimization Techniques in the Field of Engineering (ICOFE-2024). **LINK: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5091614**	(ICOFE-2024)
18	Kumar, S., Singh, R. P., Vir, R., Saha, T. K., Chaturvedi, P., & Patidar, P. K. (2024, November). Task Consolidation Algorithm to Improve the Efficiency of Cloud Computing Environment. In *Proceedings of the 3rd International Conference on Optimization Techniques in the Field of Engineering (ICOFE-2024)*. **LINK: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5091106**	(ICOFE-2024)
19	**Kumar, S**., Pal, S., Singh, S., Singh, V. P., Singh, D., Saha, T. K., & Jaiswal, P. (2022, November). **Energy Efficient Model for Balancing Energy in Cloud Datacenters Using Dynamic Voltage Frequency Scaling (DVFS) Technique**. In *Proceedings of Third Doctoral Symposium on Computational Intelligence: DoSCI 2022* (pp. 533-540). Singapore: Springer Nature Singapore. **Link:** https://link.springer.com/chapter/10.1007/978-981-19-3148-2_45	DoSCI-2022 Springer Nature Singapore
20	Solanki, S., Verma, S., Roy, P., Kumar, S., Banerjee, R., & Prasad, A. (2025, March). **Enhancing query expansion with ML-SSO: a machine learning, semantic, statistical, and ontological framework**. In *2025 IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI)* (Vol. 3, pp. 1-7). IEEE. **Link:** https://ieeexplore.ieee.org/abstract/document/10984858	IEEE- 2025
21	Kumar, S., Dewan, A., Solanki, S., Dave, J. D., Patidar, P. K., & Lilhare, S. (2025, March). **Automated Brain Tumor Identification in MRI Scans Using State-of-the-Art Deep Learning Models**. In *2025 3rd International Conference on Disruptive Technologies (ICDT)* (pp. 655-659). IEEE. **Link:** https://ieeexplore.ieee.org/abstract/document/10986532	IEEE- 2025

REWIEVER

22	Patel, K., **Kumar, S**., Singh, V. P., Singh, S. K., Saha, T. K., & Jaiswal, P. (2022, December). **To Detect Spammer from Image-Based Spam E-mail through Adjacent-Duplicate Technique.** In *2022 International Conference on Knowledge Engineering and Communication Systems (ICKES)* (pp. 1-6). IEEE. **Link:** https://ieeexplore.ieee.org/abstract/document/10060002	IEEE ICKECS-2023
23	**Kumar, S**., Pal, S., Singh, S., & Jaiswal, P. (2023, April). **Energy-Efficient Model (ARIMA) for Forecasting of Modal Price of Cod Pea Using Cloud Platform.** In *International Conference on IoT, Intelligent Computing and Security: Select Proceedings of IICS 2021* (pp. 449-461). Singapore: Springer Nature Singapore. **Link:** https://link.springer.com/chapter/10.1007/978-981-19-8136-4_37	IICS -2021 Springer Nature Singapore
24	**Kumar, S**., Pal, S., Singh, S., Singh, R. P., Singh, S. K., & Jaiswal, P. (2022, November). **An Energy & Cost-Efficient Task Consolidation Algorithm for Cloud Computing Systems**. In *International Conference on Advancements in Smart Computing and Information Security* (pp. 446-454). Cham: Springer Nature Switzerland. **Link:** https://link.springer.com/chapter/10.1007/978-3-031-23092-9_35	ASCIS-2022 Springer Nature Switzerland.
25	**Kumar, S**., Singh, V. P., Srivastava, S., Singh, R. P., & Jaiswal, P. (2023, December). **Price Forecasting of Potato Using ARIMA Model on Cloud Platform**. In *International Conference on Advancements in Smart Computing and Information Security* (pp. 52-70). Cham: Springer Nature Switzerland. **Link:** https://link.springer.com/chapter/10.1007/978-3-031-58604-0_4	ASCIS-2023 Springer Nature Switzerland.
26	Kumar, S., Singh, R. P., Vir, R., Saha, T. K., Chaturvedi, P., & Patidar, P. K. (2024, November). **Task Consolidation Algorithm to Improve the Efficiency of Cloud Computing Environment**. In *Proceedings of the 3rd International Conference on Optimization Techniques in the Field of Engineering (ICOFE-2024)*. **Link:** https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5091106	ASCIS-2024 SSRN
27	Kumar, S., Saha, T. K., Singh, P., Mangotra, V., Patidar, P. K., & Pal, N. (2025). **Deep learning approaches for image classification: Performance analysis and optimization**. In *Smart Computing and Communication for Sustainable Convergence* (pp. 258-265). CRC Press. **Link:** https://www.taylorfrancis.com/chapters/edit/10.1201/9781003637530-38/deep-learning-approaches-image-classification-performance-analysis-optimization-sachin-kumar-tapash-kumar-saha-parvinder-singh-vikas-mangotra-praveen-kumar-patidar-nitin-pal	ISCCSC2024 SSRN
BOOK CHAPTERS		
1	Detection of Tomato Disease by Using Convolutional Neural Network **Link:** https://www.amazon.in/Emerging-Trends-Engineering-Science-Management/dp/B0BT8DVKR6	IESM 2023
2	Deep Learning Technique for Classification of Medical Images on Cloud Platform **Link:** https://www.amazon.in/Emerging-Trends-Engineering-Science-Management/dp/B0BT8DVKR6	SHEAT
3	Education Sector an application of IoT **Link:** https://www.amazon.in/Emerging-Trends-Engineering-Science-Management/dp/B0BT8DVKR6	SHEAT

4	MIGRATION OF VIRTUAL MACHINES USING CLOUD COMPUTING, ISBN: 978-81-956917-0-8, Page No.(62-64). https://ashokainstitute.com/international-conference-2022	IESM 2023
5	Efficient Machine Learning Technique for Credit Card Fraud Detection, International Conference on Innovative Practices in Engineering Sciences and Management (IESM-2022), ISBN: 978-81-956917-0-8, Page No.(44-47). **Link:** https://ashokainstitute.com/international-conference-2022	IESM 2023
6	Brain Tumor Detection from MRI Images Using Deep Learning Techniques, International Conference on Innovative Practices in Engineering Sciences and Management (IESM-2022), ISBN: 978-81-956917-0-8, Page No. (319-322). **Link:** https://ashokainstitute.com/international-conference-2022	IESM 2023
7	Application of IoT in Education Sector, International Conference on Innovative Practices in Engineering Sciences and Management (IESM-2022), ISBN: 978-81-956917-0-8, Page No. (53-56). **Link:** https://ashokainstitute.com/international-conference-2022	IESM 2023

SR. NO	**NAME**	**DATE**	**LOCATION**
1	SNCS-2024	JULY 2024	SCOPUS INDEXED JOURNAL
2	NHIB-D-25-00300	JUNE 2025	SCOPUS INDEXED JOURNAL
3	NHIB-D-25-00300	AUGUST 2025	SCOPUS INDEXED JOURNAL
4	IEEE-IC3IT-2025	24-25 OCT 2025	Mysuru Royal Institute of Technology, Mandya, India
5	IEEE-ICML-ALGO-2025	29-30 AUG 2025	Chitkara University, Himachal Pradesh,
6	IEEE-IACIS	22-23 AUG 2025	Navkis College of Enggi. Karnataka
7	IEEE-ICDSNS-2025	25-26 July 2025	Kalptaru Institute of Technology
8	IEEE-NMITCON 2025	1-2 AUGUST 2025	Nitte Meenakshi Institute of Technology, Bengaluru,
9	IEEE-ICDCECE-2025	25-26 APRIL 2025	Ballari Institute of Technology & management
10	SPRINGER-GreenAI-2025	3-4 APRIL 2025	GITAM (Deemed to be University), Hyderabad
11	IEEE-ICICACS-2025	21-22 FEB 2025	SIR M. VISHWESHVARAIYA COLLEGE OF ENGINEERING, RAICHUR

12	IEEE-ICISCN-2025	24-25 JAN 2025	LINGRAJ APPA ENGINEERING COLLEGE, BIDAR
13	IEEE-ICMNWC 2024	04-05 DEC 2024	SHRI SIDDHARTHA INSTITUTE OF TECHNOLOGY, TUMAKURU
14	IEEE-ICIICS-2024	22-23 NOV 2024	SHARNBASVA UNIVERSITY, KALABURAGI
15	ICAN-2024	24-25 SEP 2024	CHITKARA UNIVERSITY
16	2nd IEEE-International Conference on Data Science and Information System (ICDSIS-2024)	17-18 MAY 2024	MALNAD COLLEGE OF ENGINEERING
17	IEEE-International Conference on Distributed Computing and Optimization Technique (ICDCOT-2024)	15-16 MARCH 2024	SJB INSTITUTE OF TECHNOLOGY
18	2nd IEEE International Conference on Networks, Multimedia and Information Technology (NMITCON)	9-10 AUGUST 2024	NITTE MINAKSHI INSTITUTE OF TECHNOLOGY
19	21ST IEEE CISCON-2024	2-3 AUGUST 2024	MIT. MAHE MANIPAL
20	SSITCON @SSIT Tumkur IEEE-2024	18-19 OCT 2023	Sri Siddhartha Institute of Technology Tumkur
21	IEEE International Conference on Signal Processing and Advance Research in Computing	12-13 Sep 2024	Amity University Lucknow Campus
22	ICIICS-2024 IEEE International Conference	22-23 NOV 2024	SARAN BASVA UNIVERSITY
23	ICMNWC-2024 IEEE International Conference	04-05 DEC 2024	SHRI SIDDHARTHA INSTITUTE OF TECHNOLOGY-BANGLORE

EXPERT TALK:

SN	DATE	TOPIC	ORGANIZATION	PLACE
1	26-28 Dec 2024	Integrating Machine Learning in Biomedical and Agricultural Research: Enhancing Precision and Productivity	Ashoka Institute of Technology & Management-Varanasi	**Varanasi**

2	23-24 March 2022	Workshop On Machine Learning & Wireless Sensor Networks	Aryamahila P.G College-	Varanasi

CONFERENCE PRESENTED		
SN	**TITLE**	**ORGANIZER**
1	Energy-Efficient Model "DenseNet201 Based on Deep Convolutional Neural Network" Using Cloud Platform for Detection of COVID-19 Infected Patients	IIT-BHU-2023
2	Deep Learning Technique for Classification of Medical Images on Cloud Platform	ETESM-2023
3	Education Sector an application of IoT	ETESM-2023
4	Detection of Tomato Disease by Using Convolutional Neural Network	ETESM-2023
5	Price Forecasting of Gold in India	BECON-2023
6	Energy Efficient Model (ARIMA) for Forecasting of Modal Price of Cod Pea Using Cloud Platform	IICS -2021(SCOPUS INDEXED)
7	Energy Efficient Model for Balancing Energy in Cloud Datacenters Using Dynamic Voltage Frequency Scaling (DVFS) Technique	DoSCI-2022(SCOPUS INDEXED)
8	Energy and Cost Efficient Model for Saving Power in Cloud	ICRTETM-2022
9	Task Consolidation Technique for Cloud Computing	ASCIS-2022
10	Covid-19 Disease Detection Using Pre-Trained Deep Convolutional Neural Network (GoogleNet) on Cloud Platform	RCOEM-2022
11	Energy & Cost Efficient Pre-Trained Convolutional Neural Network(ResNet-50) for Tomato Disease Recognition Using Cloud Platform	RCOEM-2022
12	Brain Tumor Detection Using Deep Learning Technique	IESM-2022
13	Virtual Machine Migration Using Cloud Computing	IESM-2022
14	Application of IOT in Education Sector	IESM-2022
15	Machine Learning Technique For Fraud Detection	IESM-2022

CONFERENCE ATTENDED		
SN	**TITLE**	**ORGANIZER**

1	MIGRATION OF VIRTUAL MACHINES	COTII(AMBALIKA INSTITUTE)
2	THE SIXTH SENSE TECHNOLOGY AND ITS VARIOUS THREATS	COTII(AMBALIKA INSTITUTE)

PATENT

SN	TITLE	ORGANIZER
1	Teaching potential and difficulties with modern cloud computing in the digital humanities and in technical and professional communication	Department of Promotion of Industry and Internal Trades-India
2	Computing Device for Adaptive Data Management in IoT Systems	United Kingdom Design
3	AI Enabled Disease Detection Medical Device	INDIAN DESIGN