



Mohd Usman

**Assistant Professor, Department of Computer Application, Faculty of Engineering,
Integral University, Lucknow**

(9452818917, mohdusman@iul.ac.in)

[Google Scholar](#), | [Orcid Id](#), | [Research gate](#), | [linked in](#)

PROFILE

- Ph.D. (Thesis about to submit) in Computer Science at the Department of Computer Science, University of Lucknow, Lucknow, India.
- Completed Master of Technology (M. Tech.) with First Division from Dr. A. P. J. Abdul Kalam Technical University, Lucknow.
- Completed Master of Computer Science and Applications (MCA) with First Division from Indira Gandhi National Open University.
- Completed Bachelor of Computer Applications (BCA) with First Division from Indira Gandhi National Open University.
- Qualified UGC-NET in Computer Science

RESEARCH INTEREST:

- Artificial Intelligence
- Machine Learning
- Deep Learning
- Medical Image Analysis
- Computer Vision
- Pattern Recognition
- Statistical Optimization Techniques

SUMMARY OF RESEARCH ACCOMPLISHMENT:

- Published multiple peer-reviewed research papers in high-impact SCI/SCIE and Scopus-indexed international journals, as well as proceedings at peer-reviewed international conferences.
- Authored research articles in esteemed, peer-reviewed international publications including journals by *Springer*, *Taylor & Francis*, and other leading academic publishers.
- Developed novel deep learning models and ensemble algorithms tailored for medical diagnostics (including ocular disease classification such as diabetic retinopathy, glaucoma, and cataract diagnosis, as well as oncology/cancer detection frameworks) and pattern recognition systems.
- Granted **design patents** focused on AI-driven technology applications and modern computing tools.
- Active presenter at international Springer-sponsored conferences, delivering findings on advanced deep learning architectures, medical imaging, and predictive frameworks.
- Contributed as an active reviewer and collaborator across peer-reviewed computer science

journals, supporting research quality in deep learning and computational medical imaging.

COURSE TAUGHT:

- Artificial Intelligence
- Machine Learning
- Programming Principles
- Data Structure
- Operating System

ADMINISTRATIVE/DEPARTMENTAL RESPONSIBILITY

- Worked as Assistant Professor at M.D. College of Technology and Management.

STUDENTS SUPERVISION

- Guided BCA students in the successful completion of their projects and research papers.
- Mentored M.Sc. students in their dissertations along with paper publication.

PUBLISHED/GRANT PATENTS

- Wearable device to analyze the customer Emotion, Design Number: 458413-001, Date: 11/05/2025.
- Smart watch to analyze emotion, Design Number: 458415-001, Date: 11/05/2025
- AI based device for emotion sentiment analysis from dialect speech, Design Number: 458386-001, Date: 10/05/2025
- AI-Enabled medical imaging dashboard for diagnostic applications, Design Number: 476395-001, Date: 10/10/2025.

PUBLISHED/ACCEPTED SCI/SCOPUS RESEARCH PAPERS

SCIE/SCI

- Misra P., Usman M., Chaurasia S., Mahajan G., MedLK-SCNet: A Multi-Scale Hierarchical Fusion Model for High-Precision Classification of Laryngeal Malignancies, Scientific Reports, ISSN: 2045-2322.

PAPER PUBLISHED IN INTERNATIONAL CONFERENCES

- Misra, Puneet, Mohd Usman, Ayushi Chaurasia, and Uroosha Usman. "Optimizing Ophthalmic Diagnosis: Lightweight Deep Learning for Retinal Health." In *Sustainable Developments in Computer Engineering, Green Technology and Smart Systems*, pp. 594-598. CRC Press, 2026.
- Misra, P., Usman, M., Chaurasia, S. (2026). A Multiclass Classifier for the Differential Diagnosis of Laryngeal Carcinoma from Narrow-Band Imaging. In: Shukla, S., Sayama, H., Tiwari, K., George, J.P., Kureethara, J.V. (eds) Data Science and Security. IDSCS 2025. Lecture Notes in

Networks and Systems, vol 1945. Springer, Cham. https://doi.org/10.1007/978-3-032-24075-0_12

- Usman, Mohd, Rahul Shukla, Nayab Zya, Mahima Shanker Pandey, and Abhishek Singh. "Graph convolutional neural networks for distributed recommender and prediction systems." In *Emerging Trends in IoT and Computing Technologies*, pp. 462-467. Routledge, 2023.

PUBLISHED NON-SCI-SCOPUS BUT PEER REVIEWED RESEARCH PAPERS

- Misra, Puneet, Mohd Usman, and Uroosha Usman. "Deep Learning for Early Diagnosis of Diabetic Retinopathy, Glaucoma, and Cataract from Fundus Images." *AIJFR-Advanced International Journal for Research* 6, no. 6 (2025).
- Misra, P., Usman, M., & Vishrut. (2025). An ensemble learning framework for credit card fraud detection with hyperparameter optimization. *International Journal of Electrical, Electronics and Computer Engineering*, 14(1–2), 108–115.

BOOK CHAPTERS

- Misra, P., Usman, M., & Kumar, R. (2025). A hybrid approach for early-stage detection of laryngeal cancer. In A. Pratap, S. Shahi, & S. K. Singh (Eds.), *Proceedings of First International Conference on Emerging Trends in Information Technology (ICETIT-25)* (pp. 70–74). Amity University Uttar Pradesh. ISBN: 978-93-343-5496-6.
-