

(Dr. Nafees Akhter Farooqui)

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

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(Google Scholar Citation, ORCID Id, Scopus, Web Of Science, Research gate, Inked in)

PROFILE

ACADEMIC QUALIFICATION:

- Ph.D. in Computer Science & Engineering in 2023 from School of Computing, DIT University, Dehradun, India. Thesis Title: "Crop Disease Recognition and Classification Using Deep Learning Models."
- Master of Computer Applications (MCA), 2010, with Hons., Department of Computer Applications, Integral University, Lucknow, U.P., India.
- B.Sc. (Hons.) in Statistics, 2005, with First Division, Department of Statistics, Aligarh Muslim University (AMU), Aligarh, U.P., India.
- Intermediate (XII), 2001, U.P. Board (PCM Stream), DAV Inter College ITI Mankapur, Gonda, U.P., India.
- High School (X), 1999, U.P. Board (Science Stream), DAV Inter College ITI Mankapur, Gonda, U.P., India.

WORKING EXPERIENCE:

- Presently working as Assistant Professor in the Department of Computer Application, Integral University, Lucknow, India from 2025-Till date.
- Assistant Professor, Department of Computer Science & Engineering, KL University, Vaddeswaram, Andhra Pradesh, India, from August 2023 – April 2025.
- Assistant Professor, School of Computer Applications, BBD University, Lucknow, U.P., India, from March 2023 – August 2023.
- Assistant Professor, Department of Computer Science, Era University, Lucknow, U.P., India, from March 2019 – February 2023.
- Research Cum Teaching Assistant, School of Computing, DIT University, Dehradun, India, from August 2017 – February 2019.
- Lecturer, Department of Computer Science & Engineering, ITM GIDA, Gorakhpur, U.P., India, from July 2010 July 2017.

TOTAL EXPERIENCE:

14+ Years of Teaching (Academics) at University and Engineering College Level.

RESEARCH INTEREST:

- Artificial Intelligence
- Machine Learning
- Deep Learning
- Soft Computing
- Computational Biology
- Smart Agricultural System
- Precision Agriculture

SUMMARY OF RESEARCH ACCOMPLISHMENT:

- Publications in Journals: Published 3 SCIE/SCI indexed, 3 Web of Science, 8 Scopus indexed, and 7 peer-reviewed journal papers, covering areas such as Artificial Intelligence, Deep Learning, Smart Agriculture, and Computational Biology. The most recent publication is in Scientific Reports (Nature Group, 2025, IF: 4.6).
- Books and Book Chapters: Authored 01 Book, contributed to 13 Book Chapters in CRC Press, Springer, Wiley, IGI Global, and De Gruyter, and contributed to edited volumes in AI, IoT, Cybersecurity, Digital Twins, and Precision Agriculture.
- Patents and Innovations: Secured 4 Indian patents including 1 granted design patent (*Leaf Disease Identification Robot, 2024*) and 3 published utility patents on Al-driven speech recognition, automated data collection, and tree-cutting detection using deep learning and artificial intelligence.
- Conference Presentations, Keynote Speaker and Session Chair: Presented 10 research papers
 in reputed international conferences (IEEE, Springer, Scopus indexed). Chaired sessions at IEEE
 InTech-2025 (Amity University Tashkent), IEEE ICICAT-2024 (BIT GIDA Gorakhpur & REC
 Sonbhadra), and ICTACS-2024 (Amity University Tashkent).
- Awards or Recognition: Received recognition through patent grants/publications, chaired international sessions, and active memberships in IAENG, CSTA (USA), and ASIS&T (USA), highlighting contributions to global AI and Machine Learning research communities.
- **Research Supervision**: Guided more than 60 UG/PG projects in Artificial Intelligence, Data Science, and Machine Learning. Actively involved in curriculum development, research mentoring, and departmental research activities.
- Attended more than 45 FDPs, Workshops, and Training programs, including at IIT Roorkee, NIT Jamshedpur, and AICTE ATAL Academies.
- Specialized training is completed in Artificial Intelligence, Machine Learning and Deep Learning.
- Reviewer and program committee member in various reputed international journals and international conferences.

PROFESSIONAL MEMBERSHIP:

- Life membership of International Association of Engineers (IAENG) since February 2018.
- Member of Computer Science teachers Association (CSTA), USA.
- Membership of Association for Information Science and Technology (ASIS&T), USA

COURSE TAUGHT:

- Artificial Intelligence
- Machine Learning
- Soft Computing
- Python Programming
- Data Science with Machine Learning
- Compiler Design
- Data Mining and Data Warehousing
- Data Structure Using C
- Pattern Recognition
- Programming in C
- Operations Research
- Pre-PhD Course Work on Foundation of Computer Applications in Medical Science
- Hospital Management Information System

ADMINISTRATIVE/DEPARTMENTAL RESPONSIBILTY

- Placement Coordinator of Department level for B.Tech. (CSE), MCA and BCA courses.
- Project Coordinator and Extra Co-Curricular Activities In-charge.
- Course Coordinator of B.Tech., MCA and BCA programs.
- IQAC and TLP In-charge of Department of CSE at KL University (September 2023 April 2025).
- Member, Board of Studies (BOS) and Member, Faculty Board.
- Member, NAAC Criteria I and II Committee.
- University Sports In-charge, Era University Lucknow.
- Dy. Chief Proctor, ITM GIDA Gorakhpur (August 2013 July 2017).
- Warden, Boys Hostel, ITM GIDA Gorakhpur (February 2015 April 2016).
- Department-level Placement Coordinator, ITM GIDA Gorakhpur (July 2014 July 2017).
- Timetable Coordinator, ITM GIDA Gorakhpur (July 2012 July 2017).

STUDENTS SUPERVISION

• Guided more than 60 Projects of M.Tech(CSE), M.C. A, B.C. A and B.Tech (CSE) Courses.

PUBLISHED/GRANT PATENTS

• Indian Design Patent Grant No. 393725-001

Title of Invention: "Laef Disease Identification Robot".

Field of Invention: Computer Science

Journal No is 08/2024 and Journal Date is 23/02/2024.

Grant Date: 23-02-2024

Design Patent application online available at:

https://search.ipindia.gov.in/DesignApplicationStatus/

Indian Patent No. 202131041447

Title of Invention: "An Apparatus for Automated Data Collection, Management, And Reporting Based on Deep Learning and Artificial Intelligence".

Field of Invention: Computer Science Publication Date (U/S 11 A): 26-11-2021 Patent application online available at:

https://search.ipindia.gov.in/IPOJournal/Journal/ViewJournal

Indian Patent No. 202211023781

Title of Invention: "A System and Method for Automatic Detection of Tree Cutting in Forests".

Field of Invention: Bio-Medical Engineering Publication Date (U/S 11 A): 29-04-2022 Patent application online available at:

https://search.ipindia.gov.in/IPOJournal/Journal/ViewJournal

Indian Patent No. 202341027808

Title of Invention: "Speech Recognition Services Using Artificial Intelligence System and Method

Thereof".

Field of Invention: Electronics

Publication Date (U/S 11 A): 26-05-2023 Patent application online available at:

https://ipindiaservices.gov.in/PatentSearch/PatentSearch/ViewDocuments

PUBLISHED/ACCEPTED SCI/SCOPUS RESEARCH PAPERS

• "Novel 59-layer dense inception network for robust deepfake identification" Scientific Reports, E-ISSN: 2045-2322, July 2025. https://doi.org/10.1038/s41598-025-03889-6 [SCIE Indexed]

- "Enhanced Stroke Risk Prediction: A Fusion of Machine Learning Models for Improved Healthcare Strategies" SN Computer Science, E-ISSN: 2661-8907, November 2024. https://link.springer.com/article/10.1007/s42979-024-03389-w [Scopus Indexed]
- "Hybrid bat and salp swarm algorithm for feature selection and classification of crisis-related tweets
 in Social Networks", IEEE Access, ISSN: 2169-3536, July 2024(Early Access).
 https://doi.org/10.1109/ACCESS.2024.3421571 [SCIE Indexed]
- "Advancements in Crop Disease Detection: Analytical Methods for Recognizing Disease Stages through Leaf Analysis", Journal of Electrical Systems, Vol 20, Issue 6s, pp. 2847-2856, May 2024. https://doi.org/10.52783/jes.3291 [Scopus Indexed]
- "Anomalous node detection in attributed social networks using dual variational autoencoder with generative adversarial networks", Data Science and Management, (In Press) Available online 2 November 2023 https://doi.org/10.1016/j.dsm.2023.10.005 [Scopus Indexed]
- "An Efficient Framework for Software Maintenance Cost Estimation Using Genetic Hybrid Algorithm:
 OOPs Prospective", International Journal of Computing and Digital Systems, Vol. ahead-of-print No.
 ahead-of-print. https://journal.uob.edu.bh/handle/123456789/5176 [Scopus Indexed].
- "A Meta-Analytical Study on The Role of Religiosity on Purchase Intention in The Theory of Planned Behavior", Journal of Islamic Marketing, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/JIMA-09-2021-0304 [SCIE Indexed].
- "A Novel Ensemble Machine Learning Models for Classification of Brain Tumors from MRI" Neuro Quantology, October 2022, Volume 20, Issue 14, Page 823-828. Doi: 10.4704/nq.2022.20.14. NQ880115 [Scopus].
- "Concatenated Deep Features with Modified LSTM For Enhanced Crop Disease Classification". Int J Intell Robot Appl (2022). https://doi.org/10.1007/s41315-022-00258-8 [Web of Science].
- "IOT based Automated Greenhouse Using Machine Learning Approach," Intelligent Systems and Applications in Engineering, Vol. 10, Issue No. 2, pp. 226–231, May 2022, ISSN: 2147-6799 [Scopus].

- "Analysis of Antioxidant and Rutin Content in Buckwheat Flour Bread by Machine Learning Approach,"
 Des. Eng., pp. 17188–17201, Nov. 2021,
 https://thedesignengineering.com/index.php/DE/article/view/6884 [Scopus].
- "Automatic crop disease recognition by improved abnormality segmentation along with heuristic-based concatenated deep learning model," Intelligent Decision Technologies (IDT) Vol. 16, Issue No. 2, pp. 407-429, 2022, ISSN 1872-4981 (P), ISSN 1875-8843 (E), DOI: 10.3233/IDT-210182 [Web of Science].
- "An Identification and Detection Process for Leaves Disease of Wheat Using Advance Machine Learning Techniques" in Bioscience Biotechnology and Research Communications, Volume-12 Issue-4, 1081-1091 (2019), ISSN: 0974-6455, DOI: 10.21786/bbrc/12.4/31[Web of Science].
- "Sentiment Analysis of Twitter Accounts using Natural Language Processing" in International Journal of Engineering and Advanced Technology (IJEAT), Volume-8 Issue-3, February 2019, ISSN: 2249-8958 [Scopus].

PAPER PUBLISHED IN INTERNATIONAL CONFERENCES

- Attended and presented a paper on "An Investigation of the Utilizations of Machine Learning Methods in Precision Agriculture" in International Conference on IoT, Communication and Automation Technology (ICICAT-2024) jointly organized by BIT GIDA, Gorakhpur & Rajkiya Engineering College Sonbhadra UP, India https://doi.org/10.1109/ICICAT62666.2024.10922951 (Scopus indexed)
- Attended and presented a paper on "Leaf Disease Segmentation Using UUNet++ Architecture" in International Conference on Trends in Electronics and Health Informatics (TEHI 2023) organized by Dhaka, Bangladesh, https://link.springer.com/chapter/10.1007/978-981-97-3937-0 (Scopus indexed)
- Attended and presented a paper on "Improved Hierarchical Neural Network Architecture for House Price Prediction" in 4th International Conference on Computational Methods in Science and Technology (ICCMST 2024) Organized by Department of CSE & IT, CEC- CGC Landran, Mohali (Punjab), India Technically Sponsored by CRC Press May 02-03, 2024, <a href="https://www.taylorfrancis.com/chapters/edit/10.1201/9781003501244-42/improved-hierarchical-neural-network-architecture-house-price-prediction-pandiyanathan-murugesan-md-shamsul-haque-ansari-nafees-akhter-farooqui (Scopus Indexed)
- Attended and presented a paper on "MUCORMYCOSIS PREDICTIVE ANALYSIS USING MACHINE LEARNING TECHNIQUES" in International Conference on Computing and Machine Learning Organized by Department of Computer Applications, Sikkim Manipal Institute of Technology, Sikkim Manipal University, India Technically Sponsored by <u>Soft Computing Research Society</u> March 29-30, 2024, https://link.springer.com/chapter/10.1007/978-981-97-7571-2 17 (Scopus Indexed)
- Attended and presented a paper on "Classification and Prediction of Cardiovascular Disease Using Machine Learning Techniques" in International Conference SIGMAA-2023 December 15-16, 2023.
 Organized in association with <u>Springer</u> and the International Journal of Mathematical, Engineering and Management Sciences. https://link.springer.com/chapter/10.1007/978-981-97-6349-8_31
 (Scopus Indexed)
- Attended and presented a paper on "Cost Estimation Model using 5th Generation Language Technique for Software Maintenance Project" in International Conference on Recent Innovations in

- Computing (ICRIC-2022 Volume 2) 13-14th August 2022. Organized by India and Hungary, https://link.springer.com/chapter/10.1007/978-981-99-0601-7 40 (Scopus Indexed)
- Attended and presented a paper on "The Role of Computational Biology in COVID-19 & Pandemic Challenges" in Virtual Conference on "Biological Innovations & Computational Exploration for Pandemic Challenges (BICPAC`22)" on 24th and 25th February 2022 Organized by Department of Biotechnology & Bioinformatics, Bishop Heber College, and Sponsored by Department of Biotechnology, CSIR, Ministry of Science and Technology Government of India.
- Attended and presented a paper on "Heart Health Classification and Prediction Using Machine Learning" in E-International Conference on "Challenges & Opportunities for Technological Innovation in India" (e-ICOTII-2020)12-13 December 2020 Organized by Computer Science & Engineering, Ambalika Institute of Management and Technology, Lucknow (India) (AICTE Conference)
- Attended and presented a paper on "A Machine Learning Approach to Simulating Farmers' Crop
 Choices for Drought Prone Areas" in International Conference on Emerging Trends in Information
 Technology (ICETIT)21-22 June 2019 Organized by Institute of Information Technology and
 Management, Janakpuri, Delhi (Scopus)
- Attended and presented a paper on "Design of A Data Warehouse for Medical Information System
 Using Data Mining Techniques" in Fifth IEEE International Conference on Parallel, Distributed and
 Grid Computing (PDGC) 20-22 December 2018 Dept. of CSE & IT, Jaypee University of Information
 Technology, Solan, HP. (Scopus)
- Attended and presented a paper on Voice Based Automated Gaming System in a National Conference on "Advances in Systems & Technologies" at Institute of Technology and Management, GIDA Gorakhpur on 22nd & 23rd April 2016.
- Attended and presented a Technical Note titled "Cyber Security Factor Information Protection & Factor of Social Success" in National Seminar on "Emerging Trends & Advancement in Cyber Security" at Integral University, Lucknow on 4th April 2016.
- Attended and presented a research paper on Evaluating the Performance of Middleware Load Balancing Strategy in a National Seminar on "Rural Empowerment Through Broadband" Under IETE, Lucknow Chapter on 17th March 2013.
- Attended and presented a research paper on Semantic Web Oriented Intelligent E-Learning in a National Conference on "E-Learning: Tools, Technology and current Trends" at M.A.I.T. Ghaziabad on 1st & 2nd March 2013.
- Attended and presented a research paper on An Efficient Symbolic Collective Approximation Method in a National Conference on "Challenges and Opportunities in Technological Innovation in India" at Ambalika Institute of Management and Technology, Lucknow on 16th February 2013.
- Attended and presented a research paper on Challenges of Protecting Personal Information in a National Seminar cum Workshop on "Cyber Security: Challenges and Opportunities in 21st Century" at DDU Gorakhpur University, Gorakhpur on 19th -20th February 2012.

PUBLISHED NON-SCI-SCOPUS BUT PEER REVIEWED RESEARCH PAPERS

- "Extending The Lifetime of The Wireless Sensor Network with The Help of Low Energy Adaptive Clustering Hierarchy", International Journal of Information Technology and Electrical Engineering, Vol 11, No.5, pp. 1-07, 2023. http://www.iteejournal.org/v12no5oct23 pdf1.pdf [UGC Care List A]
- "Extricate Features Utilizing Mel Frequency Cepstral Coefficient in Automatic Speech Recognition

- System", International Journal of Engineering and Manufacturing (IJEM), Vol.12, No.6, pp. 14-21, 2022. DOI:10.5815/ijem.2022.06.02 [Peer Reviewed].
- "A Study on Early Prevention and Detection of Breast Cancer using Three-Machine Learning Techniques" in International Journal of Advanced Research in Computer Science (IJARCS), Volume-9, Special Issue-2, April 2018, ISSN: 0976-5697[UGC Listed Journal].
- "Prediction Model for Diabetes Mellitus Using Machine Learning Techniques" in International Journal of Computer Sciences and Engineering, Volume-6, Issue-3, Page no. 292-296, Mar-2018, ISSN: 2347-2693 (E) [UGC Listed Journal].
- "Statistical Analysis of Parkinson's Disease Using Principle Component Analysis and Artificial Neural Network: A Critical Review" in International Journal of Advance Research in Science and Engineering (IJARSE), Volume 7, Special Issue-1, April 2018, ISSN: 2319-8354[UGC Listed Journal].
- "A Study on Importance of Power Electronics-Based Drives & Renewable Energy Sources and their Consumption" in Volume 6, Issue III, March 2018 International Journal for Research in Applied Science and Engineering Technology (IJRASET) Page No:2107- 2111, IC Value: 45.98; SJ Impact Factor: 6.887, ISSN: 2321-9653(UGC Listed Journal).
- "E-Health Information and Its Assessment" in Journal of Network Communications and Emerging Technologies (JNCET), Volume-6, Issue-5, May 2016 ISSN: 2395-5317(Online) [UGC Listed Journal].

BOOK EDITED/ AUTHORED

• Authored Book on "Object Oriented Programming" by Jayalakshmi Publications., Year: 2022, ISBN: 978-9-3919-8756-5, India

BOOK CHAPTERS

- Nafees Akhter Farooqui, Shamsul Haque Ansari, Mohd Haleem, Rafeeq Ahmed and Mohammad Islam published book chapter in Advancements in Artificial Intelligence and Machine Learning titled "Artificial Intelligence and Social Media: Strength, Management and Responsibility", Benthem Science 2025, https://doi.org/10.2174/97898153225831250101, ISBN 978-981-5322-59-0
- Nafees Akhter Farooqui, Zulfikar Ali Ansari, Rafeeq Ahmed, Ahmad Neyaz Khan, Shadab Siddiqui, Mohammad Ishrat, Mohd Haleem and Sarosh Patel published book chapter in Advancements in Artificial Intelligence and Machine Learning titled "Next-Gen Mechatronics: The Role of Artificial Intelligence", Benthem Science 2025, https://doi.org/10.2174/97898153225831250101, ISBN 978-981-5322-59-0
- Mohammad Ishrat, Wasim Khan, Syed Mohd Faisal, Monia Mohammed Al Farsi, Nafees Akhter Farooqui published book chapter in Digital Twins for Smart Cities and Urban Planning titled "Digital Twins Future Prospects in Smart Cities", CRC Press 2025, https://doi.org/10.1201/9781003510338, ISBN 9781003510338
- Md Shamsul Haque Ansari, Nafees Akhter Farooqui, Mohammad Ishrat, Wasim Khan published book chapter in Revolutionizing Urban Development and Governance With Emerging Technologies titled "IoT Applications in Urban Infrastructure and Governance", IGI Global 2025, DOI: 10.4018/979-8-3373-1375-7.ch012, ISBN 9798337313757
- Nafees Akhter Farooqui, Md Shamsul Haque Ansari, Zulfikar Ali Ansari, Ritika Mehra published book chapter in Municipal Solid Waste Management and Recycling Technologies titled "Technological Advancements in Waste Management", IGI Global 2024, DOI: 10.4018/979-8-3693-4054-7.ch012, ISBN 9798369340547

- Mohd Nadeem, Prabhash Chandra Pathak, Masood Ahmad, Nafees Akhter Farooqui published book chapter in Computational Intelligence Applications in Cyber Security titled "Identification of security factors in cloud computing: Defence security perspective", CRC Press 2024, First Edition. https://www.taylorfrancis.com/chapters/edit/10.1201/9781003514312-6/identification-security-factors-cloud-computing-mohd-nadeem-prabhash-chandra-pathak-masood-ahmad-nafees-akhter-farooqui, ISBN 9781003514312
- Nafees Akhter Farooqui, Iqra Ashraf, Rupam Jaiswal published book chapter in Intelligent Networks titled "Modernizing healthcare through IoT-based e-health systems", CRC Press 2024, First Edition. https://www.taylorfrancis.com/chapters/edit/10.1201/9781003541363-20/modernizing-healthcare-iot-based-health-systems-nafees-akhter-farooqui-iqra-ashraf-rupam-jaiswal, ISBN 9781003541363
- Nafees Akhter Farooqui, Mohd. Haleem, Wasim Khan, Mohammad Ishrat published book chapter in Intelligent Techniques for Predictive Data Analytics titled "Precision Agriculture and Predictive Analytics: Enhancing Agricultural Efficiency and Yield", John Wiley & Sons, Inc. 2024, https://doi.org/10.1002/9781394227990.chg
- Nafees Akhter Farooqui, Madhu Pandey, Rupali Mirza, Saquib Ali and Ahmad Neyaz Khan published book chapter in Augmented and Virtual Reality in Social Learning titled "Exploratory study of the parental perception of social learning among school-aged children based on augmented and virtual reality", De Gruyter 2023, Volume 3. https://doi.org/10.1515/9783110981445-008 ISBN 9783110994926 (hbk), ISBN 9783110981445 (ebk).
- Nafees Akhter Farooqui, Ritika Mehra, Samrah Butool Faridi published book chapter in Security Implementation in Internet of Medical Things titled "An Intellectual Analysis of Structural Healthcare Systems In India Using Intelligence-Based Techniques", CRC Press 2023, First Edition. https://doi.org/10.1201/9781003269168-3 ISBN 978103216034 (hbk), ISBN 978103216065 (pbk), ISBN 9781003269168 (ebk).
- Wasim Khan, Mohammad Ishrat, Mohd Haleem, Ahmad Khan, Mohammad Kamrul Hasan, Nafees Farooqui, published book chapter in Book Series: Advances in Cyberology and the Advent of the Next-Gen Information Revolution, titled "An Extensive Study and Review on Dark Web Threats and Detection Techniques", Publisher: IGI Global, June 2023, DOI: 10.4018/978-1-6684-8133-2, ISBN13: 9781668481332 | ISBN10: 1668481332 | EISBN13: 9781668481356
- Nafees Akhter Farooqui, published book chapter in Book: Information and Communication
 Technology titled "The Role of Advanced Machine Learning Technique in Environment, Biodiversity
 and Disaster Management in Information & Communication Technology", AARGON Press, New
 Delhi 2021, Print ISBN 978-93-94070-92-9
- Ritika, Nafees Akhter Farooqui, Ankita Tyagi, published book chapter in Handbook of Wireless Sensor Networks: Issues and Challenges in Current Scenarios Advances in Intelligent Systems and Computing titled "Data Mining and Fusion Techniques for Intelligent Wireless", Springer Nature Switzerland AG 2020, vol 1132, pp. 592–615, 9 Feb 2020. https://doi.org/10.1007/978-3-030-40305-8 Publisher: Springer, Cham, Online ISBN 978-3-030-40305-8, Print ISBN 978-3-030-40304-1.
