

Faculty Profile: Sakshi Taaresh Khanna Department of Computer Science Ram Lal Anand College, University of Delhi



Title	Ms.	First Name	Sakshi	Last Name	Khanna	Photograph
Designation		Assista	nt Professor			
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Google Scholar		https://scholar.google.com/citations?hl=en&user=EflQyBsAAAAJ				
Research Gate		https://www.researchgate.net/profile/Sakshi-Khanna-10				
ORCID ID		https://orcid.org/0009-0006-2936-8708				
Scopus ID		58855189300				
Vidwan ID		403074				
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Educational Qualifications

Degree	Institution	Year
Pursuing Ph.D	Amity University, Noida	2021
M.C.A.	Guru Gobind Singh Indraprastha University	2006-2009
B.Sc.(H) Computer Science	University of Delhi	2003-2006

Career Profile

Teaching Experience: 14 Years

Industry Experience: 1 Year

Administrative Assignments

Current:

Member: Help desk Committee (Admission)

Member: Alumni Committee

Member: IT Infrastructure Committee

Member: Swachhata Action Plan Committee (Implementation & Monitoring)

Co-Convener: E-Waste Management Committee

Nodal Coordinator: GSUITE

Nodal Coordinator: Virtual Labs IIT Delhi

ISO Internal Auditor

Preparation of Examination Duty Chart

Previous:

Successfully handled various responsibilities being a coordinator, convener, member of various committees, resource person for certificate courses, assisted in preparation of Exam duty charts in the college for last 14 years of service.

Areas of Interest / Specialization

Data Mining

Machine Learning

Deep Learning

Subjects Taught

Programming with Python

Programming fundamentals using C++

Computer System Architecture

Computer Networks

Operating Systems

Database Management System

Data Structures

Design and Analysis of Algorithms

Advanced Data structures and algorithms

Data Mining-I

Data Mining-II

Machine Learning

Deep Learning

Data Visualization using R

Research Guidance

- Guided many students for summer internship projects
- Guided MCA student of IGNOU for final year project, session 2024
- Mentored students for NPTEL Courses and helped in addressing and designing solutions to the problems
- Guide and assist students in pursuing higher education by providing counselling and writing recommendations.

Publications Profile

Papers:

- Neutrosophic Meta SHAP and Neutrosophic Meta Lime: An efficient framework for explainable AI in Oral Cancer Detection. *International Journal of Neutrosophic Science*, vol., no., 2024, pp. 373-245. DOI: https://doi.org/10.54216/IJNS.230328
- 2. Neutrosophic ANFIS Machine Learning Model and Explainable AI Interpretation of Oral Cancer from Clinical Images". *International Journal of Neutrosophic Science*, vol., no., 2024, pp. 198-221. **DOI:** https://doi.org/10.54216/IJNS.240218
- **3.** EXAIOC: Explainable AI for Oral Cancer Diagnosis and Prognosis An Application Centric Approach for Early Detection and Treatment Planning, Lecture notes in Networks and systems, Intelligent and Fuzzy Systems, Springer Publications, ISBN: 978-3-031-70018-7, https://doi.org/10.1007/978-3-031-70018-7
- 4. GACNNXAI: Employing Genetic Algorithm Enhanced Convolutional Neural Networks and Explainable Artificial Intelligence for Detecting Oral Cancer in Medical Imaging, 2024 IEEE Third International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES), Delhi, India, 2024, pp. 353-358, DOI: 10.1109/ICPEICES62430.2024.10719032
- 5. Enhancing Mathematical Optimization in Intensity-Modulated Radiation Therapy with Artificial Intelligence and Machine Learning, South Eastern European Journal of Public Health, ISSN: 2197-5248, 1831-1840, DOI: https://doi.org/10.70135/seejph.vi.2703
- Explainable AI integrated Fuzzy Rule-Based Machine Learning and Nonlinear Variation Inequalities for Oral Cancer Disease Detection and Treatment Methodology in Healthcare, 1092-910X, Advances in Nonlinear Variational Inequalities, ISSN: 1092-910XVol 28 No. 1s (2025), Doi: https://doi.org/10.52783/anvi.v28.2439
- 7. Machine Learning Strategies for Enhanced Disease Prediction and Management, Springer Book Series "Lecture Notes in Networks and Systems".
- 8. Impact Assessment of Over-The-Top (OTT) Platforms on Youth: A Survey Questionnaire Study, International Journal of Intelligent Systems and Applications in Engineering, 12(4), 3122-3135, https://ijisae.org/index.php/IJISAE/article/view/6805

- 9. Detecting Deception: An AI-Driven Approach to identify Dark Patterns, International Journal of Intelligent Systems and Applications in Engineering, 12(4), 1658-1669, https://ijisae.org/index.php/IJISAE/article/view/6464
- **10.** Sorting Algorithms Demystified: A comprehensive guide with the ISort Visualizer, Intelligent Systems and Applications in Engineering, 12(4), 2373-, https://ijisae.org/index.php/IJISAE/article/view/6645
- 11. FEEDU-Android Based One Stop Solution for Feedback Analysis, Aegaeum Journal, Volume 8 Issue 8 2020, Page No: 694-707, DOI: 16.10089.AJ.2020.V818.285311.3969, ISSN: 0776-3808
- 12. Embracive compendium of carpooling applications and proposed framework for agent mediated carpooling systems, JOURNAL OF CRITICAL REVIEWS, ISSN- 2394-5125 VOL 7, ISSUE 13, Page No: 1281-1290, 2020
- 13. The challenged digital capacity of India is now a state of a living in lockdown, Aegaeum Journal, Volume 8 Issue 8 2020, Page No: 291-301
- 14. Dexterity of quantum computation and quantum information processing: A contemporary Annex, IJRAR, e-ISSN: 2348-1269, p-ISSN: 2349-5138, Vol 7, Issue 2, Page No. 189-196 May 2020, Paper Id: IJRAR19L1549, DOI: http://doi.one/10.1729/Journal.23698
- 15. Laser Technology Improving Wireless Communications: A comprehensive study on Laser Communicator, IOSR-JCE, e-ISSN: 2278-0661, p-ISSN: 2278-8727, Volume 19, Issue 4, Ver. II (Jul.-Aug. 2017), PP 26-33. https://www.iosrjournals.org/iosr-jce/papers/Vol19-issue4/Version-2/E1904022633.pdf
- 16. Millennium of Virtual Reality in e-Commerce: Proposed Virtual Environment and Prototype, IJCTA, July-August 2017, Vol 8(4), 467-474.ISSN: 2229-6093.

Patents:

1. UK Design Patent on Smart Biometric Device to Record Attendance of Employees, Design Number: 6345938, International Design Classification, Version: 14-2023, class: 14 Recording, Telecommunication or Data Processing Equipment, Subclass: 02 Data Processing equipment as well as peripheral apparatus and devices

Chapters in books and e-chapters (Published)

- 1. Computer Fundamentals, Wisdom publication ISBN: 9789381505205
- 2. Computer Applications in Management, Wisdom publication ISBN:- 9789381505052
- 3. EXAIOC: Explainable AI for Oral Cancer Diagnosis and Prognosis An Application Centric Approach for Early Detection and Treatment Planning, Lecture notes in Networks and systems, Intelligent and Fuzzy Systems, Springer Publications, ISBN: 978-3-031-70018-7, https://doi.org/10.1007/978-3-031-70018-7

Conference Organization/ Presentations

Events Organized:

- 1. Organized an Alumni talk in association with Alumni Committee on 12th November 2024.
- 2. Organized a workshop on virtual lab in association with IIT Delhi on 16th October 2024.
- 3. Organized an Internship Drive by ValBiz on 5th April 2024.
- 4. Organized an internship drive by Baba Pinnak on 23rd February 2024.
- 5. Organized a 40 Hour certificate course on Rust Programming from 3rd February to 4th April 2024.
- 6. Organized a lecture on IPR, Patents and Copyright law on 2nd February 2024
- 7. Coordinated DPBH- Dark Patterns buster Hackathon 2023 on January 30, 2024.
- 8. Conducted an Outreach Activity i.e. Workshop on IT Literacy in collaboration with HOPE India World Wide School from 2nd November to 3rd November 2023.
- 9. Organized an alumni lecture on Career Counselling held on 11th October 2023.
- 10. Coordinated a workshop on Virtual Labs in association with VLabs IIT Delhi on 18th October 2023.
- 11. Coordinated a workshop on Virtual Labs in association with VLabs IIT Delhi on 2nd February 2023.
- 12. Organized and coordinated the Internship Drive by Adsify Technologies on 4th May 2023.
- 13. Organized a Peer Tech talk on Getting Started with Docker on 13th April 2023.
- 14. Coordinated Departmental Festival Automata on 29th March 2023.
- 15. Organized a Peer Tech talk on Journey of Research on 18th March 2023.
- 16. Organized a Peer Tech talk on Introduction to GITHUB on 4th March 2023.
- 17. Organized a talk on "Fuzzy Logic and AI" on 4th April 2023.
- 18. Coordinated a two days workshop on Introduction to Cyber Security in association with NIIT Technologies from 3rd to 4th October 2022.
- 19. Coordinated a National Seminar on AI, Automation and Future of Work in association with ICT academy on 16th September 2022.
- 20. Coordinated an event Poster Making competition on Solutions for addressing e-waste on 9th September 2022.
- 21. Coordinated a certificate course in creative writing -English during the academic session 2020-21.
- 22. Coordinated three days Faculty Development Program on "Stress Management" organized by Department of Computer Science, RLA in association with ICT Academy from 30th Jan 1st Feb 2020.
- 23. Coordinated for one week Faculty Development Program on "Salesforce Fundamentals for Business Administration Specialists" organized by Department of Computer Science RLA in association with ICT Academy from 9th Dec 14th Dec 2019.

- 24. Organized a workshop on Virtual Labs in association with VLabs IIT Delhi on 3rd October 2019.
- 25. Organized Two Days Faculty Development Program on "Emotional Intelligence" organized by Department of Computer Science RLA from 4th Jan-5th Jan 2019
- 26. Organized a Seminar on "Latest Trends in Blockchain Technology" organized by Department of Computer Science RLA on 26th September 2019.
- 27. Organized one week certificate course on "Cyber Forensics" organized by Department of Computer Science RLA in association with Innovians Technologies held on 27th May 31st May 2019.
- 28. Organized a National Seminar on "Ethical Hacking" organized by Department of Computer Science RLA on 7th March 2019.
- 29. Organized a one Day Workshop on "Machine Learning" organized by Department of Computer Science RLA on 20th Feb 2019.

Invited Talks, Resource person, invited Chairperson, Conference Paper presentations (Oral):

Resource Person:

- 30. Resource Person in 40 Hour Certificate Course on Rust Programming conducted by Department of Computer Science from 3rd February to 4th April 2024.
- 31. Resource Person in 40 Hour Certificate Course on Modern Web Development Tools conducted by Department of Computer Science, RLAC from 15th August to 4th October 2022.
- 32. Resource Person in the One Week Faculty Development Programme on Prospects and Challenges of Google Suite in Teaching and Learning organized by Swami Shraddhanand College from 21st to 28th August 2020.
- 33. Resource Person in a workshop on IT Literacy in collaboration with HOPE India World Wide School from 2nd November to 3rd November 2023.

Presentations: International

- 34. Fuzzy Logic in Economic Analysis of Distributed Sustainable Generation and Grid Interconnection, 2nd International Conference on Renewable Energy, Green Computing& Sustainable Development, Springer publications, 21st to 25th February 2025.
- 35. Enhancing Solar Energy Integration in Electric and Autonomous Vehicles through Hybrid AHP-TOPSIS Model, 2nd International Conference on Renewable Energy, Green Computing& Sustainable Development, Springer publications, 21st to 25th February 2025
- 36. Data Driven approached to Green Building Material Selection using Deep Learning, 2nd International Conference on Artificial Intelligence: Theory and Applications, organized by IBS Bangalore, from 9th August to 10th August 2024.
- 37. Machine learning strategies for enhanced disease prediction and Management, 2nd International Conference on Artificial Intelligence: Theory and Applications, organized by IBS Bangalore, from 9th August to 10th August 2024.

38. Participated in 5th International Online Conference on Recent Advancements in interdisciplinary Research held on 25-26th July 2020, organized by Foundation of Innovative Research at City University, Malaysia.

Presentations: National

39. Participated in the National e-conference on SGD 4 on 24th July 2020, organized by Education Committee of PHD Chamber of Commerce and Industry.

Internships Conducted:

Summer Internship for Students:

- 1. Sorting Algorithms Demystified: A comprehensive guide with the ISort Visualizer, Intelligent Systems and Applications in Engineering, 12(4), 2373-, https://ijisae.org/index.php/IJISAE/article/view/6645: Submitted by- Rishabh Jain, Rishabh Chopra
- 2. Impact Assessment of Over-The-Top (OTT) Platforms on Youth: A Survey Questionnaire Study, International Journal of Intelligent Systems and Applications in Engineering, 12(4), 3122-3135, https://ijisae.org/index.php/IJISAE/article/view/6805 : Submitted by- Vashu Tangri, Anukool Johri, Gautam Gupta
- 3. Detecting Deception: An AI-Driven Approach to identify Dark Patterns, International Journal of Intelligent Systems and Applications in Engineering, 12(4), 1658-1669, https://ijisae.org/index.php/IJISAE/article/view/6464 :Submitted by- Vashu Tangri, Anukool Johri

Awards and Distinctions

- Certificate of Appreciation as a Nodal Coordinator for achieving the second rank in Virtual Lat Usage in the state of Delhi for the Year 2024.
- Top Performing mentor certificate from NPTEL for online certification course on Design ar Analysis of Algorithms
- Qualified University Grants Commissions (UGC), National Eligibility Test (NET)
- Distinction in Masters in Computer Applications

Association With Professional Bodies

Annual Membership of Association of Computing Machinery.

Lifetime member of Computer Society of India.

Annual Membership of IEEE.

Other Activities

Research

Reviewer for InSc- International Journal of Computer Science & Information Technology.

Participations:

- Participated in one day Google patent Workshop by Turnip Innovations
- Completed a 4 weeks MOOC on Cooperative Learning Pedagogy started from 22 May 2020 to 22 June 2020.
- Certificate of completion of a course on "Machine Learning with Python" by IBM, Coursera.
- Certificate of completion of a course on "Deep Learning Onramp" by MathWorks.
- Certificate of completion of a course on "Machine Learning Onramp" by MathWorks.
- Certificate of completion of a course on "Programming for everybody: Getting Started with Python" by University of Michigan, Coursera.
- Participated in 5 days Virtual Faculty Development Program on "Teaching Techniques with Gamification" organized by ICT Academy from 14 May 19 May 2020.
- Participated in two days workshop on "COVID-19 Android App Development" organized by Finland Labs (A Unit of Revert Technology Pvt. Ltd.) In Association with National Social Summit, IIT Roorkee from 11th May 12th May 2020.
- Participated in International e-conference on "Innovation Infrastructure Development in India: Issues, Challenges and Way Forward" organized by Innovation Society India in association with Amity College Florida, IARS, Team -NIC, WAIMS, Business Press India on 8th May 2020.
- Participated in one week (9 hours) Faculty Development Program on "Fundamentals of Machine Learning" organized by ICT Academy from 6th May 12th May 2020.
- Participated in two days workshop on "Python with COVID-19 Data Web Scraping and MySQL" organized by Finland Labs (A Unit of Revert Technology Pvt. Ltd.) In Association with National Social Summit, IIT Roorkee from 2nd May 3rd May 2020.
- Participated in two days workshop on ML & AI Using Covid-19 Virus Data Analysis organized by Finland Labs (A Unit of Revert Technology Pvt. Ltd.) In Association with National Social Summit, IIT Roorkee from 29th April 30th April 2020.
- Participated in 2 days Faculty Development Program on "Emotional Intelligence" organized by Department of Computer Science, Ram Lal Anand College, University of Delhi from 4th Jan 5th Jan 2019.
- Participated in one week Faculty Development Program on "HADOOP (HOROTONWORKS)" organized by Department of Computer Science, Ram Lal Anand College, University of Delhi from 21st May – 25th May 2018.

- Participated in 2 days Faculty Development Program on "Introduction of Internet of Things" conducted by ICT Academy at Rajdhani College, University of Delhi from 29th Jan 30th Jan 2018.
- Participated in one week Faculty Development Program on "Data Science and Big Data Analytics" conducted by ICT Academy at HMR Institute of Technology and Management, New Delhi from 27th Nov 1st Dec 2017.
- Attended a short term course on "Information Security and Digital Forensics" (ISDF-2017) organized by Division of Information Technology, NSIT from 5th June 9th June 2017.
- Attended a National Seminar on "Advances in Big Data: Issues & Challenges" organized by Gitarattan International Business School on 16th October 2015.
- Attended a National Seminar on "Cyber Security" organized by Gitarattan International Business School on 1st Feb 2012.

Sakshi

Signature of Faculty Member