

Dr Kanika Lakhani

Address: A-9/502, Samanvay Saptarishi Manjalpur, Vadodara, Gujarat-390011 Mobile No. 9891757841 drkanikalakhani@gmail.com DOB: 18th Oct'1984

Career Objective

Work in an intellectually motivating environment where I can put into creative use my analytical & technical abilities and experience acquired hitherto to work progressively to accomplish the organization's objectives and subsequently attain for myself higher responsibility levels

Educational Qualification

Education	Subject	Institute	Year	Percentage
PhD	IT	Amity University	2015-2021	1 st Rank
PGDIT	IT	SCDL, Pune	2011	63.76%
M.Tech	CSE	ITM, Gurgaon	2008-2010	80.59%
B.E.	IT	APJ, Sohna	2002-2006	66.89%
12 th	Science, Maths	CBSE	2002	62.6%
10 th	Science, Maths	CBSE	2000	70.2%

Work Experience (12 yrs; 11 yr Academics, 1 yr Industry)

- Assistant Professor at Maharaja Sayajirao University of Baroda, Gujarat since July 2020.
- Served Manav Rachna University, (formarly Manav Rachna College of Engineering) as Assistant Professor from 18th Sept 2007 to 19th Aug 2016.
- Served HCL Comnet Systems & services Ltd. as Specialist Systems from 17th July' 2006 to 3rd Sept' 2007.

PhD Research Title

"Pattern Recognition using self-organizing maps for the detection of Dental problems and Root Surface Area Estimation of Human Permanent Dentition"

Books Published

- 1. Kanika Lakhani, Question Bank in Data Mining & data Warehousing-Creative Prakashan, Ahmedabad (2015)
- 2. Kanika Lakhani, Advance Java Programming (UTU)- S.K. Kataria & Sons (2013)
- 3. Kanika Lakhani, Gaurav Girdhar, Data warehousing & Data Mining- S.K. Kataria & Sons (2012)
- 4. Kanika Lakhani, Ashish Kumar, Advance Java (MDU)- S.K. Kataria & Sons (2011)
- 5. Kanika Lakhani, Wireless & Mobile Communication-Natraj Publishing House (2010)
- 6. Kanika Lakhani, Programming Languages- Natraj Publishing House (2009)
- 7. Kanika Lakhani, Ashish Kumar, Java with Network Programming- Natraj Publishing House (2008)

Publications in Journal/ Book Chapters/ Conferences

2018

1. A novel method using SOM for recognizing patterns in dental radiographs-a conceptual approach, **ELSEVIER Journal**: Informatics in Medicine Unlocked, 2018, Vol 12, Pages 21-26. ISSN: 2352-9148 (Scopus Indexed)

https://www.sciencedirect.com/science/article/pii/S2352914818300753

2017

 Root surface area measurement of permanent dentition in Indian population – CBCT analysis, ELSEVIER Journal: Informatics in Medicine Unlocked, 2017, Vol 9, Pages 1-5. ISSN: 2352-9148, (Scopus Indexed)

http://www.sciencedirect.com/science/article/pii/S2352914817300291?via%3Dihub

- Feature Extraction in Human Dentition Radiographs- Temporary & Permanent, Springer Publication "Advances in Intelligent Systems and Computing" (Springer, Germany-SCOPUS Indexed) and International Conference on Computer Communication & Computational Sciences (ICCCCS'16), Aryabhatta College of Engineering & Research Center, Ajmer, August 12-13,2016. <u>https://link.springer.com/chapter/10.1007/978-3-319-47952-1_41</u>
- Feature Extraction in Dental Radiographs in Human Extracted and Permanent Dentition, Springer Publication "Advances in Intelligent Systems and Computing" (Springer, Germany-SCOPUS Indexed) and International Symposium on Intelligent Systems

Technologies and Applications (ISTA'16), LNMIT Jaipur, Sept 21-24,2016. https://link.springer.com/chapter/10.1007/978-3-319-47952-1_41

- Feature Extraction in Permanent Human Dentition Radiographs, Springer Publication "Lecture Notes in Networks and Systems" (LNNS Series, SCOPUS Indexed), and International Research Symposium on Computing and Network Sustainability (IRSCNS 2016) July 1, 2016 (Co-located with ICT4SD 2016, Goa, INDIA). https://www.springer.com/in/book/9789811039348
- Analyzing Edge Detection techniques for Feature Extraction in Dental Radiographs, ELSEVIER Journal: Perspectives in Science, ISSN:2213-0209, Sep 2016, Vol 8, Pages 395-398 and International Conference on recent trends in Engineering & Material Sciences (ICEMS-2016), Jaipur National University, Jaipur, 17th-19th March, 2016. <u>http://www.sciencedirect.com/science/article/pii/S2213020916301094</u>
- 5. Pixel Count in Dental Radiographs compared to various Edge Detection Techniques, International Conference on Innovative Research in "Civil, Computer Science, Information Technology, Mechanical, Electrical and Electronics Engineering" at Jawaharlal Nehru University, New Delhi held on 20-21st March 2016 organized by "Krishi Sanskriti Publications". Published in Journal of Basic and Applied Engineering Research p-ISSN: 2350-0077; e-ISSN: 2350-0255; Volume 3, Issue 3; January-March, 2016, pp. 243-246

2015

 Black hole eradication technique (BETC) for securing MANET based AODV, International Journal of Advance Research in Science & Engineering (IJARSE), ISSN 2319-8354, Vol 4, Issue: SI (01),March 2015, IF 1.142 and International Conference on Recent Trends in Engineering Science & Management (ICRTESM) at JNU Convention Center, New Delhi on 15th March 2015. http://www.ijarse.com/images/fullpdf/1427562201_766.pdf

- A Simulated Novel approach for identifying Black-Hole attack in AODV based MANET, International Journal of Computer & Technology (IJCT), USA, Council for Innovative Research, ISSN: 2277-3061, Vol 4, No 2 March - April 2013, <u>http://cirworld.com/index.php/ijct/article/view/1051</u>
- 2. A Cluster based Technique for Securing Routing Protocol AODV against Black-hole Attack in MANET, International Journal of Distributed and Parallel systems (IJDPS), France, ISSN:0976-9757 [Online]; 2229-3957 [Print], Vol.4, No.2, March 2013 http://airccse.org/journal/ijdps/current2013.html

3. *Pervasive Computing: Wearables- A move from anytime, anywhere to all the time everywhere,* at Savera Group of Institutions, Gurgaon for National Conference on Global Competitiveness: Paradigm shift in Management, Engineering & Science on April 27, 2013

2012

1. *The Fruition of the Fuzzy Sets from Crisp Sets*, **Technical Reporter**- Bi-annual In-house Journal of Manav Rachna College of Engineering, Volume-1 May 2012.

2011

 A Power-Efficient technique to avoid packet loss in MANET, International Conference on Emerging Trends in Networks and Computer Communications (ETNCC) at Udaipur held on 22-24th April, 2011, published by IEEE. IEEE Conference Record Number for ETNCC-2011:18690, ISBN: 978-1-4577-0240-2, IEEE Catalog Number: CFP1196N-ART <u>http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=5945011</u>

- Implementing Digital Structure with RSA Encryption Algorithm to enhance the data security in Cloud Computing, PDGC 2010 at Jaypee University of Information Technology, Solan published by IEEE. Issue Date: 28-30 Oct. 2010, page: 211 – 216, ISBN: 978-1-4244-7675-6, INSPEC Accession Number: 11745612, Digital Object Identifier: 10.1109/PDGC.2010.5679895
- A Simulation Model to Secure the Routing Protocol AODV against Black-Hole Attack in MANET, IJCSNS, Korea, ISSN: 1738-7906, Vol. 10, No. 5, May 2010, Thomson Reuters <u>http://paper.ijcsns.org/07_book/201005/20100507.pdf</u>
- 3. A Novel Method for Intrusion Detection System to Enhance Security in Ad hoc Network, Journal of Computing, USA, Vol. 2, Issue 5, No. 15, May 2010, ISSN 2151-9617, http://arxiv.org/ftp/arxiv/papers/1005/1005.4023.pdf
- 4. Attacks, Security Mechanisms & Challenges in Wireless Sensor Networks, at Apeejay College of Engineering, Sohna for the National Conference on Emerging Technologies And Advancements in Computing NCETAC'10 on May 13, 2010.
- 5. *Concepts, Approaches and Challenges in Database Security*, at Apeejay College of Engineering, Sohna for the National Conference on Emerging Technologies and Advancements in Computing NCETAC'10 on May 13, 2010
- 6. *Implementing Cloud Storage and Security aspects in Cloud Computing*, at Maharaja Agrasen Institute of Management & Technology, Jagadhri for the 2nd International Conference on "Innovative Practices in Management and Information Technology for Excellence"- SRIJAN'10 on May 8, 2010.

- 7. Web Mining in effect with AI Technique and Approaches, at Maharaja Agrasen Institute of Management & Technology, Jagadhri for the 2nd International Conference on "Innovative Practices in Management and Information Technology for Excellence"-SRIJAN'10 on May 8, 2010.
- 8. Solution-Secure Routing Protocol in MANET: Securing AODV, at Maharaja Agrasen Institute of Management & Technology, Jagadhri for the 2nd International Conference on "Innovative Practices in Management and Information Technology for Excellence"-SRIJAN'10 on May 8, 2010.
- Design, Features and Security Challenges in Database Management System, at Rayat & Bahra Institute of Engineering & Bio-technology for the 1st All India National Conference on Challenges in Emerging Computer Technologies on 8-9th April'2010.
- Data Mining Architecture, Life Cycle and Technology, at Gurgaon Institute of Technology & Management, Gurgaon for the National Conference on Next Generation Computing of Computer Science on 20th March'2010.
- 11. Securing the ad-hoc routing protocol AODV in MANET, at Gurgaon Institute of Technology & Management, Gurgaon for the National Conference on Next Generation Computing of Computer Science held on 20th March'2010.
- Unlicensed Mobile Access Technology for GSM Security, at Gurgaon Institute of Technology & Management, Gurgaon for the National Conference on Next Generation Computing of Computer Science held on 20th March'2010.

2009

 Implication and Suggestive Measures for Cyber Crimes, at Guru Nanak Dev Engineering College, Ludhiana for the National Conference on Emerging principles & Practices of Computer Science & Information Technology (EPPCSIT) on 4-5th Sept'2009.

- On-Demand Disjoint Path Routing in Wireless Sensor Networks, VOYAGER The Journal of CSE & IT Department, Institute of Technology & Management, Gurgaon, India, Vol 7, No.1 Pages 32-36, July-Dec, 2008, ISSN 0973-4872
- 2. *Effective use of Audio Conferencing in Distance Language Courses*, at Manav Rachna College of Engineering, Faridabad for National Conference on Future Trends in Software Software Development on July 4-5, 2008.
- 3. *Video Conferencing in Effect with Distance Education*, at Manav Rachna College of Engineering, Faridabad for National Conference on Future Trends in Software Software Development on July 4-5, 2008.
- 4. *Criticality in reaping the benefits of an Automated Performance Management System*, at International Conference on Management, Art and Science at Gurukul Kangri University, Haridwar on 15-17th Sept'2008.

- 5. *ERP: Key to Operational Efficiency*, at International Conference on Management, Art and Science at Gurukul Kangri University, Haridwar on 15-17th Sept'2008.
- 6. *Technological trends in Datawarehouse and a webhouse for business organizations*, National conference on Data Warehousing and Data Mining (DWDM'08) organized by Computer Society of India, Dehradun on 8-9th Feb'2008.

Poster Presentation

1. An overview of the dangers of Nanotechnology & its Control Measures, at Ansal Institute of Technology, Gurgaon for International Conference –cum-workshop on Nanoscience and Nanotechnology on 12-16th Oct'2009.

Workshops Attended

- 1. Workshop on "*High Performance Computing (HPC) and Deep Learning facilities*" from 6th-9th Sept, 2021 organized by Gujarat Council on Science & Technology (**GUJCOST**), Gandhinagar in association with C-DAC, Pune.
- Workshop on "Wireless Networks and Network Simulator (WNSS-2012)" from 9th-10th July 2012 organized by Department of CSE, Jaypee University of Information Technology, Waknaghat, Solan.
- 3. National workshop on "*Open Source Software-LAMP* + *JOOMLA*" from 19th -21st Dec 2011 organized by ITM University, Gurgaon
- Workshop on "Sensor Network & Web Enablement" from 5th Nov 2011 to 6th Nov 2011 Organized by Indian Institute of Technology Delhi, Sponsored by Department of Science and Technology (DST), Govt. of India, Under the aegis of Foundation for Innovation and Technology Transfer (FITT), IIT Delhi
- National Workshop on "An awareness on Open Source Software" at Savera Group of Institutions, Gurgaon on 1st April 2011

Seminars Attended

- 1. Security in Routing Protocols in MANET, at ITM, Gurgaon in National Seminar on Emerging Computing Trends, Communication, Control and Information Technology on 13th April'2009.
- Risk Management with Online Banking and E-Commerce, at Apeejay Institute of Management in AICTE sponsored National Seminar on "Enterprise Information Systems", Jalandhar on 24th May' 2008.

Short Term Course/Faculty Development Program

- 5-day online Faculty Development Program on "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education (AICTE) from 21st - 25th March, 2022
- GUJCOST Sponsored one-week Short-Term Training Program on "Recent Advancements in Deep Learning" organized by Deptt of IT, FTE, Dharmsinh Desai University (DDU), Nadiad from 28th March to 1st April 2022
- 3. Faculty Development Program on "*Machine Learning and Soft Computing Techniques*" at Amity University, Noida on 28-29th May, 2015.
- 4. Faculty Development Program on "*Neural Networks using MATLAB*" at ITM University, Gurgaon, on 8th April, 2013.
- AICTE sponsored one week Staff Development Program on "IT for Modeling & Executing Business Process" at Manav Rachna College of Engineering, Faridabad. (File no. RIFD/SDP/153/2011-12) from 28th May to 1st June, 2012.
- Faculty Development Program on "Current Global Pedagogical Practices" by Manav Rachna Academic Staff College held at Manav Rachna International University, Faridabad from 14th May to 23rd May 2012
- 7. Short term course on "*Advance Java*" at National Institute of Technical Teacher's Training & Research (**NITTTR**), Chandigarh from 30th Jan'2012 to 3rd Feb'2012
- Short term course on "Wireless Communication" at National Institute of Technical Teacher's Training & Research (NITTTR), Chandigarh from 8th Feb'2008 to 15th Feb'2008

Webinars Attended

- 1. Webinar on "*Cyber Warfare, Cyber Security and Cyber Citizenship*" on 9th April 2022 organized by BVICAM, New Delhi in association with IEEE Delhi Section & Industry Institute partnership cell (IIPC), AICTE.
- 2. Webinar on "*Towards Academic Excellence in the 21st Century*" on 30th Sept 2021, organized by Faculty Development Cell, AICTE, New Delhi, Event number: 2512 639 0151
- 3. Webinar on "*Industry 4.0 Trends and Challenges*" on 27th Nov 2021, organized by BVICAM, New Delhi in association with IEEE Delhi Section & Industry Institute partnership cell (IIPC), AICTE.
- 4. Webinar on "6G for a Hyperconnected Future" on 11th September, 2021, organized by BVICAM, New Delhi in association with IEEE Delhi Section & Industry Institute partnership cell (IIPC), AICTE.
- 5. Webinar on "*Citations and Reference Management using Mendeley*" on 14th August 2020, organized by BVICAM, New Delhi in association with IEEE Delhi Section & Industry Institute partnership cell (IIPC), AICTE.
- 6. Webinar on "Unleashing Data Science and AI" on 8th August 2020, organized by BVICAM, New Delhi in association with IEEE Delhi Section & Industry Institute partnership cell (IIPC), AICTE.

7. Webinar on "*Simplifying IPR and Patent Filing*" on 24th July 2020, organized by BVICAM, New Delhi in association with IEEE Delhi Section & Industry Institute partnership cell (IIPC), AICTE.

Member of Organizing Committee in Conference/ Workshop/ Seminars

- 1. Five-day "*Workshop on Android App Development*" as Faculty Development Program at Manav Rachna College of Engineering, Faridabad from 5th-9th May 2015.
- 2. Three-day "Workshop on Open-Source Software-LAMP Technology" as Faculty Development Program at Manav Rachna College of Engineering, Faridabad from 25th-27th Jan 2012.
- 3. One-day "*National Conference on Next Generation Computing*" at Gurgaon Institute of Technology & Management, Gurgaon on 20th March'2010.
- 4. Two-day "*National Conference on Future Trends in Software Development*" at Manav Rachna College of Engineering, Faridabad from 4th -5th July, 2008.

Projects Undertaken

1. Won First Prize for the project titled "*Braille Sense*" (Android App for Blinds) in 3rd National Project Carnival organized by Faculty of Engineering & Technology, Manav Rachna International University, Faridabad, held on 4th April 2016. (**PATENT filed**)

Expert Lecture Delivered

- 1. Threats, Security measures and remedial actions in Software Defined Networks (SDN), in five days online Faculty Development Program (FDP) on "Futuristic Trends in Artificial Intelligence, Analytics, Cyber Security & Telecommunication", by Department of Computer Science & Engineering, Faculty of Engineering and Technology, Shree Guru Gobind Singh Tricentenary University, Gurugram between 21st -25th December 2021.
- 2. *Research Methodologies* for M.Tech students at Manav Rachna College of Engineering, Faridabad on 25th April 2014.
- 3. *Dynamic Programming Techniques* for M. Tech students at Manav Rachna College of Engineering on 25-26th July 2013
- 4. *Routing Protocols in MANET* for faculty and M. Tech. students at Manav Rachna International University, Faridabad on 8th April 2012.
- 5. Guest Speaker at National Workshop on "*How to write a Research Paper-Prerequisites*" at J.R. Memorial Institute of Technology & Management, Rewari on 17th April'2010.

Industry Interaction

- 1. ACCENTURE FACULTY DEVELOPMENT PROGRAM SEASON 1 on 'Cognitive Computing' held on 19th Dec 2015 at Accenture Services, Gurgaon.
- 2. INFOSYS Certified Bronze Member for Corporate Training 2014-15

Master's Thesis Guidance

- 1. Edge Detection Technique for Image Enhancement in Dental Radiographs, July 2015, Manav Rachna University, Faridabad
- 2. Black hole Eradication Technique (BETC) for securing MANET based AODV, July 2013, Manav Rachna College of Engineering, Faridabad

Membership of Professional Bodies

- Life Member ISTE
- Member and Reviewer of Computers in Biology and Medicine- An Elsevier Journal ISSN: 0010-4825, Scopus Indexed
- Member and Reviewer of IJDPS (International Journal of Distributed & Parallel Systems) ISSN: 0976 9757 [Online]; 2229 3957 [Print], AIRCC (Academy & Industry Research Collaboration Center), France
- Member and Reviewer of the Council of Innovative Research- International Journal of Computers & Technology (IJCT), USA
- Member of the Editorial Board of JCIT (Journal of Convergence Information Technology), New Zealand.
- Member and Reviewer of the International Committee on AICIT-International Conference Series (The International Association for Information, Culture, Human and Industry Technology), Korea.
- Member and Reviewer of Global Journal of Computer and Information Technology (GJCIT), Peak Journals, USA
- Member and Reviewer of Journal of Engineering, Computers & Applied Sciences (ISSN: 2319-5606), Blue Ocean Research Journals, India

Achievements/Awards

- h-index 4
- i-10 index 2
- Citations 254
- Highly Influential Citations 8
- 1st position in PhD

- 1st position in M.Tech Computer Science & Engineering
- Microsoft Certified Professional (MCP) in Exchange Server 2K3 with 88%. MCP ID: 5724914

Responsibilities as Academician

- Technical Event Coordinator-MRU, Faridabad
- Coordinator-Projects & Training: CST Department, MRU, Faridabad
- Summer Training Coordinator: CSE Department, MRCE, Faridabad
- Mentor & Class Incharge M.Tech 1st Semester

(Kanika L. Chaudhary)