Faculty Profile

Faculty Name	Dr. Anju Bhandari Gandhi
Designation	Professor Incharge(R&D) & Professor(CSE)
Qualification	Ph.D, M.Tech, B.Tech
Email	anjugandhi.cse@piet.co.in
Area of Interest	Artificial Intelligence, Machine Learning, Fuzzy
	Logic
Work Experience (Total)	15
Teaching	15
Research	12
• Industry	0
• Others	0
Courses taught at Diploma/ Post	Expert Systems, Simulation Modelling,
Diploma/ Under Graduate/ Post	Fundamentals of Computing, Web Engineering,
Graduate/ Post Graduate Diploma	Research Methodology, Value-Added Course-
Level	Artificial Intelligence and Machine Learning
Membership of Professional Bodies	ISTE, IEEE
Research Publications	19
Research Papers UGC-CARE	01
Research Papers SCOPUS	02
• Research Papers	16
WoS/SCI/ABDC	
List of Publications	Enclosed as Annexure-1
Book and Chapter Publications	
Books Authored published by	
International Publishers	
Books Authored published by	Editor of the proceedings of 02 International
National Publishers	Conference
Publication of Chapter in Edited	
Books	

Editor of Book by International	Editor of 1 VOLUME of International Journal-IGI
Publishers	
Editor of Book by National	Editor of 1 VOLUME of National WOS Journal
Publishers	
Translation Work of Book	
• List of Book and Chapter	Enclosed as Annexure-2
Publications	
Patents	
Published	02
List of published patent(s)	Enclosed as Annexure-3
• Filed	01
List of filed patent(s)	Enclosed as Annexure-3
PhD Guidance	
Degree Awarded	
Thesis Submitted	01
M.Tech. Guidance	
Degree Awarded	
Thesis Submitted	10
Research Project	
List of Research project	NIL
Consultancy	
List of Consultancy	NIL
Awards & Honours	07
List of Awards & Honours	Enclosed as Annexure-4
Invited lectures / Resource Person/	06(Invited lectures)
paper presentation in Seminars/	
Conferences/full paper in Conference	
International (Abroad)	
International (Within Country)	18

National	28
List of published papers	Enclosed as Annexure-5
Organizing National Conference/	17
International Conference/ FDP/STTP	
List of Conference/FDP/STTP	Enclosed as Annexure-6
committee	
Social Contributions and Sports	01
List of Social Contributions and	Enclosed as Annexure-7
Sports	

List of Publications: ANNEXURE-1

- 1) Anju Bhandari, V.P. Singh "Proposal and Implementation of MPLS Fuzzy Traffic Monitor", International Journal of Advanced Computer Science and Applications (IJACSA), ISSN: 2156-5570, Vol. 7(1), pp. 562-570, January, 2016, Impact factor- 1.505.
- 2) Anju Bhandari, V.P. Singh "Congestion Control using Fuzzy Based LSPs in Multiprotocol Label Switching Networks", International Journal in Foundations of Computer Science & Technology (IJFCST), Academy and Industrial Research Collaboration Centre (AIRCC), ISSN: 1839-7662, Vol. 6 (2), pp. 1-21, March, 2016.
- 3) Anju Bhandari, V.P. Singh "Design of Fuzzy-based Traffic Provisioning in Software Defined Network", International Journal of Information Technology and Computer Science (IJITCS), MECS Publisher, ISSN: 2074-9015, Vol. 8 (9), pp. 49-61, September, 2016. Global impact factor-0.716.
- 4) Anju Bhandari Gandhi, Devendra Prasad, Umesh Kumar Lilhore, "Suicidal Behaviour Screening using Machine Learning Techniques", International Journal of Biomedical Engineering and Technology(IJBET), ISSN. 1752-6426. (IN PRESS)
- 5) Afshan Hassan, Amit Kumar Bindal, Anju Bhandari Gandhi, Devendra Prasad, "Mathematical Model to Analyse the Effect of Quarantine on Spread and Containment of COVID-19", Annals of the Romanian Society for Cell Biology, ISSN:1583-6258, Vol. 24, Issue 2, 2020, Pages. 153 164, Received 24 October 2020; Accepted 15 December 2020.

- 5)Anju Bhandari Gandhi, Devendra Prasad, Umesh Kumar Lilhore, "Suicidal Behaviour Screening using Machine Learning Techniques", International Journal of Biomedical Engineering and Technology, ISSN:1752-6426, IN PRESS.
- 6) Dhruv Vohra, Gunjan, Anju Gandhi, "Innovative Techbin: A Solution for green city" in International Journal of Scientific research in Computer Sience and Engineering, Volume 8, issue 4, August 2020.
- 7) Megha, Anju Bhandari Gandhi, "An Implementation of Machine Learning as Intelligent tool for Churn Prediction in Telecommuncations" in International Journal of Management, IT & Engineering, ISSN: 2249-0558, Vol 8, 7(1), pp 6-12., July (2018).
- 8) Megha, Anju Bhandari Gandhi, S. C. Gupta, "Machine Learning as Intelligent tool for Churn Prediction in Telecommuncations" in International Journal of Computer Applications, ISSN: 0975-8887, Vol 181(10), pp 16-22., August (2018).
- 9) Anju Bhandari Gandhi, Jeet kaur, "Security and DDOS Mechanisms in Internet of Things" in International Journal of Advanced Research in Computer Science (IJARCS), ISSN: 0976- 5697, Vol. 8 (9), pp.261-265, November 2017, Impact factor-6.82.
- 10) Anju Bhandari Gandhi, Jeet kaur, "Multiple DDoS Attack Detection using Non-Linear Support Vector Machine over IoT Network" in International Journal of Advance Research in Science and Engineering (IJARSE), ISSN: 2319-8354, Vol. 7 (3), pp.467-483, January 2018, Impact factor-2.83.
- 11) Anju Bhandari, Navneet Kaur, "Literature Review on Clustering Topology Analysis for Heterogeneous Wireless Sensor Network", International Journal for Scientific Research & Development, ISSN: 2321-0613, Vol. 5(04), pp. 1167-1170, july,2017
- 12) Anju Bhandari, Navneet Kaur, "PSOGSA Based Improved LEACH Algorithm", International Journal of Research in Electronics and Computer Engineering, ISSN: 2348-2281, (Vol. 5(3), July-Sept. 2017, pp.374-377.
- 13) Anju Bhandari, Annu Ailawadhi," Literature Review on an Approach to Detect Packets Using Packet Sniffing", Journal of Network Communications and Emerging Technologies (JNCET), ISSN: 2395-5317, Vol 7(6), pp 12-16., June (2017).

- 14) Anju Bhandari, Nidhi Malik, "Literature Review on Protocols for Wireless Sensor Networks", in Journal of Network Communications and Emerging Technologies (JNCET), ISSN: 2395-5317, Vol 7(6), pp 17-22., June (2017).
- 15) Anju Bhandari, Nidhi Malik, "Energy Consumption Minimization in WSN using BFO", in International Journal on Recent and Innovation Trends in Computing and Communication, ISSN: 2321-8169, Vol. 5(8), pp. 93 98, Aug-2017.
- 16) Anju Gandhi, Shivani Sharma "Robust Algorithm to Design Host, watermark Image using Visual Cryptography on Color Image" in International Journal of Advanced Research in Computer Science (IJARCS), ISSN: 0976-5697, Vol. 5 (8), pp.175-180, August 2014. Impact factor-6.82.
- 17) Anju Gandhi, Nitika Singh, "Research of Improved Association Rule Algorithms (Apriori and FP-Growth)" in International Journal of Emerging Trends in Science and Technology (IJETST), ISSN: 2348-9480, Vol. 1 (6), pp. 956-960, August 2014. Impact factor-2.838.
- 18) Anju Gandhi, Poonam Rani, "Intrusion Detection System using K Means and Naive Bayes Classification" in International Journal of Advanced Scientific and Technical Research (IJAST), RS Publication, ISSN: 2249-9954, Vol. 5 (4), pp. 614-619, August 2014. Impact factor-3.94.
- 19) Anju Gandhi, Ritika Chugh, "Title: Scalable and Efficient Key Management in LAN" in International Journal of Mobile & Adhoc Network (IJMAN), International Forum of Researchers Students and Academician Publication, ISSN: 2231-6825. Vol. 1 (1), pp. 88-91, May 2011.

List of Book and Chapter Publications: Annexure-2

- Editor of the proceedings of International Conference on "Intelligent Systems:
 Approaches, Technologies and Networks, ISBN NO. 978-93-83861-29-4,
 MARCH, 2019
- 2) Editor of the Special Issue" "Intelligent Systems: Approaches, Technologies and Networks" of International Journal of Distributed Artificial Intelligence (IJDAI), Vol.11, Issue 1, pg. 1-52.
- 3) Editor of the Special Issue of the International Journal Advances and Applications

4)

Enclosed as Annexure-3

- Dr. Anju Bhandari Gandhi, Arun Rana, Deepak Kumar Wadhwa, Shally Nagpal, Rahul Kaushal, Dr. S. C. Gupta, Sumit Rana, "SMART GARBAGE MONITORING SYSTEM USING IOT USING RASPBERRY PI on 03WITH PI CAMERA" Application number 202011004634, Published -02-2020.
- 2. Dr. Anju Bhandari Gandhi, Anshul Rani, Shivani Gaba, Deepak kumar Wadhwa, "LOW-K SIDE-WALL SPACER BASED INNER GATE ENGINEERED JUNCTIONLESS SILICON NANOTUBE FET" Application number 202011033495, Published on 05-08-2020.
- **3.** Shakti Kumar, Ajay Singh, Ishant Kumar, Rajeev Kumar, Amar Singh, Monika Gambhir, Anju Gandhi, and Harminder Kaur "A LIGHT FIDELITY (LIFI) BASED WIRELESS STEREO SOUND SYSTEM", Ref No.: E12/119/2021/DEL, Application No.: 202111002663, Controller General of Patents, Designs & Samp; Trade Mark, **Filed**.

List of Awards & Honours: Annexure-4

- 1) Recieved 5 star ratings by Ministry of Education, Govt. of India as President, PIET-Innovation Council.
- 2) Awarded with the sanction of Rs 80,000/- from ICSSR, MHRD. 2019 for conducting International Conference, 2019.
- 3) Awarded with the sanction Rs 20,000/- from Department of Science and Technology, Government of Haryana, 2017, 2018, 2021 for celebrating National Technology Day.
- 4) Certified for being the Judge of SIH-2018 from Department of Telecommunications.
- 5) Letter of Appreciation received for Proctor in IEEE Xtreme Programming Competition 14.0, 24 Oct, 2020.
- Letter of Appreciation received for completion of successful NBA Accreditation work, 2019.
- 7) Letter of Appreciation received for getting 5-Star ratings by MHRD for PIET'S IIC, 2020

Invited lectures / Resource Person/ paper presentation in Seminars/ Conferences/full paper in Conference/ List of Papers: Annexure-5

International

- Anju Gandhi, V. P. Singh, "Applicability of Multi Protocol Label Switching Networks (MPLS): A Survey" in International Conference on "Emerging Technologies", Vol.1 (1), ISSN: 978-93-83842-55-1, pp. 399-408 sponsored under TEQIP organized at NCCE, Israna on 24th April 2014.
- 2) Anju Bhandari, Aditya Bhandari, Tanu Kawatra "Awakening with Spirituality: beyond Imagination" in International Conference on Power of Inner Peace II, ISSN: 978-93-5156-715-8, Vol.(2), pp. 138-155, DAV Centenary College, Faridabad on 9th January 2016.
- 3) Megha, Vikram Bali, Anju Bhandari Gandhi, "Research Paper on Methods for churn Prediction in the Pre-paid Mobile Telecommunications Industry" in International Conference on "Recent innovations in Engineering, (ICRIE-2018)", PP. 59, organized at NCCE, Israna on 30th 31th April, 2018.
- 4) Anju Bhandari, Shivani, "Mobile ad-hoc Networking" in International Conference on "Emerging Technologies", Vol.1 (1), ISSN: 978-93-83842-55-1, PP. 377-382 sponsored under TEQIP organized at NCCE, Israna on 24th April 2014.
- 5) Anju Gandhi, Richa Setiya, "QoS Support in Next Generation Services" in International Conference "Downtrend Challenges in IT" organized at PCTE, Ludhiana in May 2009.
- 6) Anju Bhandari, "A Study of Open Source Framework Network Simulator -3" in International Conference on "Innovation & Trends to Support Make in India" sponsored under TEQIP organized at NCCE, Israna on 25th - 26th March 2017.
- 7) Anju Bhandari Gandhi, K K Paliwal, "Blueprint of an Intelligent Traffic Force in Software Defined Networks" in International Conference on "Futuristic trends in Computing and Networking(ICFTCN-2018)", PP. 97-106, organized at Chandigarh University, Mohali on 2th 3th April, 2018.
- 8) Mohd Azmat, Anju Bhandari Gandhi, Shakti Arora, "Live Data Migration Appraoch from Relational Tables to schema free with RDD" in International Conference on "Futuristic trends in Computing and Networking(ICFTCN-2018)", PP. 24-28,

- organized at Chandigarh University, Mohali on 2th 3th April, 2018.
- 9) Mohd Azmat, Shakti Arora, Anju Bhandari Gandhi, "Design Environment of Live Data Migration Database Systems" in International Conference on "Recent innovations in Engineering, (ICRIE-2018)", PP. 16-17, organized at NCCE, Israna on 30th 31th April, 2018.
- 10) Jeet kaur, Anju Bhandari Gandhi, "Security over Internet of Things: perception and Solution" in International Conference on "Recent innovations in Engineering, (ICRIE-2018)", PP. 41-42, organized at NCCE, Israna on 30th 31th April, 2018.
- 11) Jai Prakash, Neeraj Tyagi, Anju Bhandari Gandhi, "Design and Development of city guide Application" in International Conference on "Recent innovations in Engineering, (ICRIE-2018)", PP. 18, organized at NCCE, Israna on 30th 31th April, 2018.
- 12) Apoorva Bhandari, Aman Sinha, Surjeet, Anju Bhandari Gandhi, "An Open Development Environment for Semantic Web Applications" in International Conference on "Recent innovations in Engineering, (ICRIE-2018)", PP. 17-18, organized at NCCE, Israna on 30th 31th April, 2018.
- 13) Pulkit kansal, Shubham Sindhwani, Randeep Singh, Anju Bhandari Gandhi, " Employment Enhancement Learner and Specialist" in International Conference on "Recent innovations in Engineering, (ICRIE-2018)", pp. 19, organized at NCCE, Israna on 30th 31th April, 2018.
- 14) Anju Bhandari, Ishita Arora, "Mission Skill Development Learning", International Conference on "Smart Technology in the Engineering, Management and Sciences", pp. 82-83 organized at Delhi Technical Campus, Greater Noida on 11- 12, January, 2018.
- 15) Niyanta, Anju Bhandari Gandhi, Ruchi Tandon, "Smart Precision Farming System For High Crop Yielding" in International Conference on "Intelligent Systems: Approaches, Technologies and Networks (ISATN-2019)", PP. 107-110, organized at PIET, Samalkha on 29th March, 2019.
- 16) Achal, Anju Bhandari Gandhi, Aditya Bhandari "Advent Artificial Intelligence Finance Management" in International Conference on "Intelligent Systems: Approaches, Technologies and Networks (ISATN-2019)", PP. 31-32, organized at

- PIET, Samalkha on 29th March, 2019.
- 17) Nitika Chawla, Tarun Kumar Arora, Anju Bhandari Gandhi, "Sentiment Analysis of Twitter using Classifier" in International Conference on "Intelligent Systems: Approaches, Technologies and Networks (ISATN-2019)", PP. 14-17, organized at PIET, Samalkha on 29th March, 2019.
- 18) Navjot Kaur Saini, Yogesh Kukreja, Piyush Sharma, Anju Bhandari Gandhi, "Analyzing Social response to specific program" in International Conference on "Intelligent Systems: Approaches, Technologies and Networks (ISATN-2019)", PP. 49-51, organized at PIET, Samalkha on 29th March, 2019.

National

- 1) Certified for successfully completing one week online ATAL FDP on "Artificial Intelligence", sponsored by AICTE, organized by Jaypee Institute of Information Technology, Noida, 1-10-20 TO 05-10-20.
- 2) Certified for successfully completing one week online STTP on "Moral values and Professional Ethics", sponsored by AICTE, organized by DMS, PIET, 19-10-20 TO 24-10-20.
- 3) Certified for successfully completing one week online FDP on "Magical shift towards cloud Computing", sponsored by AICTE, organized by DMS, PIET, 19-10-20 TO 24-10-20.
- 4) Webinar on Machine Learning and DeepLearning conducted by The Federal Academy For CyberEducation on SundayJuly26,2020.
- 5) AICTE- Patent Drafting Webinar Series.29th May-2 June-2020.
- 6) Webinar entitled "Live Launch of Artificial Intelligence & Data Science" held on 30th June-2020.
- 7) Webinar entitled "Artificial Intelligence and Machine Learning for Gen Z" held on 20th June-2020,
- 8) 5 Day-National Level online faculty development Programme on "MACHINE LEARNING".
- 9) Anju Gandhi, "QoS design issues in MPLS Networking" in National Level Seminar "Challenges in Software Engineering Research & Practices" sponsored under AICTE

- organized at NCCE, Israna on 31st March 2010.
- 10)Anju Gandhi, Richa Setiya, "QoS Support in Next Generation Services" in National Level Conference sponsored under AICTE on "Future trends in Software Development" organized at Manav Rachna College of Engineering, Faridabad, 2008.
- 11)Anju Gandhi, "QoS Support in Multimedia Services" in National Conference sponsored by AICTE organized at NCICS, July, 2008.
- 12) Anju Gandhi, Richa Setiya, "A survey of issues in Next Generation Services" in National Conference on "Recent trends in Computer and Information Technology" organized at PIET, Panipat in April, 2009.
- 13) Anju Gandhi, Richa Setiya, "A Review of QoS in Next Generation Services" in National Level Seminar "Emerging trends in Software Engineering" organized at NCCE, in 5th 6th Sept, 2008.
- 14) Dhruv, Nishchal, Anju Bhandari Gandhi, "Obstacle Avoiding Car like Robot" in National Conference "Innovative Research in Language, Science & Management (IRLSM)" organized at DAV Centenry College, NH-3,NIT, Faridabad, 11th - 12th October, 2019
- 15) Niyanta, Achal, Anju Bhandari Gandhi, S.C.Gupta "The Eagle Eye Drone" in National Conference "Innovative Research in Language, Science & Management (IRLSM)" organized at DAV Centenry College, NH-3,NIT, Faridabad, 11th - 12th October, 2019.
- 16) Tarun bansal, Anju Bhandari Gandhi, "Smart Traffic Control System" in National Conference "Innovative Research in Language, Science & Management (IRLSM)" organized at DAV Centenry College, NH-3,NIT, Faridabad, 11th - 12th October, 2019.
- 17) Certified for participating in AICTE recognized Short Term Course on "Communication Skills through ICT" conducting by Curriculum Development Center at NCCE, Israna from 7th 11th Sept, 2015.
- 18) Attended AICTE sponsored National Seminar on Mobile Computing and Mobile Applications Development (MOBAPP-2014) at NCCE, Israna on 28th March 2014.
- 19) Certified for attending two weeks FDP in the domain "Web Applications and Software Development" at NCCE, Israna on 21st December 2013.

- 20) Certification of Advance Diploma In NS2 Simulation from NEX-G Exuberant Solutions Pvt. Ltd. Noida from 27th May 27th Aug, 2013.
- 21)Certified for attending One Week Training on "Soft Skills" at Infosys, Chandigarh on 3rd June 2011.
- 22)Attended AICTE sponsored National level Seminar on "Information Technology Software Reliability" at NCCE, Israna, Panipat, Feb, 2007.
- 23)Attended Two weeks Faculty development program (FDP) program on "Entrepreneurship Development and Small Business Management" at NCCE sponsored from Department of Science & Technology (DST) from 12th -24th Dec, 2016.
- 24) Attended and Worked as organizing secretary in National Seminar "Cyber Threats Vulnerabilities & Security Issues in Digital India" in NCCE, Israna, Panipat" on 25th 26th Feb. 2017.
- 25) Certified for attending one week webinar on the "Induction Training Programme through ICT" at NCCE, Israna from 27^{th} Feb -3^{rd} Mar, 2017.
- 26)Certified for attending 3 days workshop on the "Basics Programming using Python" at PIET in collaboration of FOSSEE, IIT Bombay funded by National Mission on Education through ICT, MHRD, Govt. of India from 16 july -18 july, 2018.
- 27) Certified for attending one week Faculty development program (FDP) program on the "Cloud Computing through ICT" at PIET, Samalkha from 27^{th} Oct -3^{rd} Nov, 2017.
- 28) Anju Bhandari, Shakti Arora, Hari Singh, "Freedom issues in Cloud Era", National Conference on Digital Disruption: The Challenges and Opportunities", pp.26 organized at PIET, Samlakha on 2017.

Organizing National Conference/ International Conference/ FDP/STTP

Invited lectures

- Delivered an Expert Lecture on "Hands on Fuzzy Logic Toolbox" in FDP on "Soft Computing Applications to Design Of Intelligent Systems" (FDPIS-2019) ", 18th – 20th July, 2019 in PIET.
- Delivered an Expert Lecture on "Hands on Fuzzy Logic Toolbox" in FDP on "Soft Computing Applications to Design Of Intelligent Systems" (FDPIS-2019) ", 18th – 20th Nov, 2019 in PIET.

- Delivered an Expert Lecture on "Classification Techniques in Machine Learning" in National Level FDP on "Recent Trends in Machine Learning and Deep Learning", 28th 1st August, 2021 in MMU, Mullana, Haryana.
- 4) Delivered an Expert Lecture on "Hands on Fuzzy Logic Toolbox" in STTP1, STTP2 on "DESIGN OF SOFT COMPUTING BASED MACHINE LEARNING MODELS (STTP-Series-2021)", 26th 1st May, and 17th-22nd May, 2021 in PIET.
- 5) Delivered an Expert Lecture on "Cyber Crime and Security" in The Millenium School, Panipat on 27 Nov, 2019.
- 6) Conducted Expert lectures (IT WORLD, CAREER COUNSELLING, PERSONALITY DEVEOPMENT) in various schools and camps, 2016.

Organizing National Conference/ International Conference/ FDP/STTP: Enclosed as Annexure-6

- Course Coordinator and Member Secretary of AICTE Sponsored STTP Series "DESIGN OF SOFT COMPUTING BASED MACHINE LEARNING MODELS", April, May, June, July, 2021.
- 2) Coordinator of AICTE IDEA LAB at PIET.
- 3) Programme Coordinator of Engineer's Day-2018, 2019, 2020
- 4) Programme Coordinator of National Technology Day- 2018 & 2019, 2020, 2021.
- 5) Convener of the International Conference of "Intelligent Systems: Approaches, Technologies and Networks" (ISATN-2019), March 29, 2019.
- 6) Convener of the Faculty Development Programme on "Data Science and Big Data" (FDPDSBD-2019), 20-24th May 2019.
- 7) Convener of the Faculty Development Programme on "Soft Computing Applications to Design of Intelligent Systems" (FDPIS-2019), 18th-20th July 2019.
- 8) Convener of the Faculty Development Programme on "Data Analysis and Machine Learning" (FDSML-2019), Dec, 2019.
- 9) Convener of the ICT Based Short Term Training Programme on 'Strengthening Industry Academia Integration in Technical Institutions' to be conducted by EDIC Dept. of NITTTR, Chandigarh from 09-13 December, 2019.
- 10) Organized Expert Talk in the Inaugural Ceremony of PIET IEEE STUDENT BRANCH

- and conducting COMTECHNOVATION Technical Event, 2019.
- 11) Coordinator of the IEEE Workshop Live- Stream"5G Tech for Tactical & First Responder Networks" (2018), Google Cloud Webinar "LET'S TALK AI"(2019), Google Cloud Webinar "CLOUD ON AIR"(2019), .
- 12) Organizing Secretary of the Seminar "Enhancing Skills and Employability using Futuristic Technologies", 2018.
- 13) Organizing Secretary of the International Workshop of "Mobile Multimedia Internet", 2018.
- 14) Organizing secretary in National Seminar "Cyber Threats Vulnerabilities & Security Issues in Digital India" in NCCE, Israna, Panipat" on 25th 26th Feb, 2017.
- 15) Worked as Convener of District level Science Exhibition of school Students,2017
- 16) Worked as Organizing Secretary of National Level Seminar "Cyber threats", 2017
- 17) Worked as Treasurer of International Conference on "Innovation & Trends to Support Make in India", 2017.

List of Social Contributions and Sports: Enclosed as Annexure-7

1) Conducted 12 Expert lectures (IT WORLD, CAREER COUNSELLING, PERSONALITY DEVEOPMENT) in various schools and camps, 2016.