BIO-DATA

1.	**Name**	Rakhi A. Kalantri
2.	**Designation**	Assistant Professor
3.	**Residential Address**	Thane – 410202.
4.	**Total Experience**	16 Years
5.	**Qualifications**	PhD Pursuing
6	**Area of Specialization**	Robotics, IOT, Security

7.	**Employment Record**		

Institution	Year (From To)	Designation
Fr. C.R.I.T. Vashi, Navi Mumbai	June 2007 – Till date	Assistant Professor
Pravara Rural Engg. College Loni	August 2004 – May 2007	Lecturer
Govt. College of Engg. Aurangabad	January2004-May2004	Lecturer
M.G.M. College of Engg. Aurangabad	December 2002-December 2003	Lecturer

8.	**Undergraduate / Postgraduate Teaching Experience and Subjects Taught**

Subjects Taught at UG level

Sr.No.	Name of Subject	Semester
1.	Discrete Structure (DIS)	III-COMP/III-IT
2.	Computer Organization & Architecture Lab (COA)	III-COMP
3.	Computer Graphics	IV -COMP
4.	Theory of Computer Science	IV-COMP
5.	Web Technology Lab (WTL)	V- COMP
6.	Microprocessor	V-COMP
7.	System Programming & Compiler Construction Lab(SPCC)	VI-COMP
8.	Mobile Communication & Computing	VI-COMP
9.	Network Programming Lab(NPL)	VI-COMP
10.	Cryptography &System Security	VI-COMP
11.	Software Architecture (SA)	VII-COMP
12.	Mobile Computing	VII-COMP
13.	Soft Computing	VII-COMP
14.	Cloud Computing Lab(CC)	VIII-COMP
15.	Computer Network	V-COMP

9.	**Research Funding / Consultancy Services:**					
	Research Grants:					

Sr.No.	Name of Funding Organization	Type of Grant	Amount (Rs.)	Year	Name of Research Project
1.	University of Mumbai	Minor Research Grant	20,000 /-	2016-2017	Android Controlled Wheelchair
2.	University of Mumbai	Minor Research Grant	35000/-	2018-19	M-Vision

10.	**Professional Societies Fellowship / Membership: ISTE**
11.	**Projects guided in UG/PG level**

Sr.No.	Name of the Project
1.	Vital Registration System
2.	Billing Edge
3.	Hand gesture recognition
4.	RFID Based Toll Collection System
5.	Devanagari to English Converter
6.	Anti-Theft Location Detection Chip
7.	Image Framework For Library Application
8.	Predictive Modelling in Campaign Management
9.	Gesture Glove
10.	Disaster Management using Swarm Robotics
11.	IOT based deep learning device
12.	Climate Change And Its Impact On Health
13.	Two-Way Sign Language Converter for Speech Impaired
14.	Secure File Storage On Cloud Using Cryptography
15.	Distributed multi-camera synchronization
16.	Mental Health Solution
17.	3D Reconstruction of Indoor Scenes
18.	Venture Analyzer- Analyzing and predicting the success of ventures for smarter investments.
19.	Automated Lip-Reading Sentence Prediction
20.	User behavior Modeling
21.	Assistant for Resume and Personality Assessment
22.	PETSTOP: One Stop Solution for all PETS
23.	Campus Navigation

12.	**Short Term Training Programmes attended**

Course Attended:

- A course on "Faculty Development Programme on Communication Skills" organized by Fr.C.R.I.T. Vashi from October 03-09 2013.
- A course on "Faculty Development Programme on B-I-Cognos" organized by TCS Kensington Powai from Jan 28-29 2013.
- A course on "MATLAB & Simulink for Engg. Education" organized by Mathworks India on 09 Dec. 2014.
- A course on "Core & Advanced Java" organized by Seed InfoTech Vashi from June 15-01 2009.
- Two days FDP on Big Data Analytics from 15th – 16th April 2015 at FCRIT Vashi.

- One-week National Level FDP on 'Recent Trends & Innovations in Digital Forensic" organized by AISSMS Pune 25th to 30th May-2020
- One week online FDP on "LATEX" organized by Bharati Vidyapeeth College of Engineering, Pune 11th – 15th May 2020.
- Attended the one week online FDP on "LATEX" from 11th – 15th May 2020 organized by BharatiVidyapeeth College of Engineering, Pune.
- Attended three days online Workshop on "Education4.0- Season-II" organized by IQAC, Atharva College of Engineering on 28th – 30th May 2020
- Three days online FDP on "Exploring Research Challenges and Opportunities in Science & Technology" oraganized by LTCOE 27th – 29th May 2020.
- One week online FDP on "Data Science" organized by Fr. CRIT, Bandra 26th – 30th May 2020.
- Five days National online FDP on "Artificial Intelligence" Organized by Universal College of Engineering 22nd – 26th May 2020.
- One week online FDP on "Advance in Internet of Things", organized by Fr. CRIT, Bandra 29th May – 2nd June 2020.
- Five days National Level FDP on "Disruptive Technologies of Industry 4.0" from 30th may – 03^{rd}June 2020 organized by Fr. CRIT, Bandra
- One week FDP on "Usage of Technologyin Covid-19" from 28th May – 2nd June 2020 OrganizedTerna Engineering College, Nerul.
- Cybersecurity Compliance Framework &System Administration 4-Weeks.
- AR (Augmented Reality) & Video Streaming Services Emerging Technologies 7-Weeks.
- Digital Footprint 3-Weeks.
- Orientation program on "Deep Learning and its Application" Organized by KJSIEIT on 13 Dec. 2021.
- Online faculty orientation program of CSDC8011 Deep Learning and CSDL8021 Deep Learning Lab" organized by Fr.CRIT on 06th January 2023.
- 30 hours FDP on: "Deep Leaning for NLP and Computer Vision" organized by Bharathi Institute of Technology on 10th July 2023.
- 30 hours FDP on: "Python and IOT" organized by ExcelR Edtech Pvt. Ltd on 7th Aug 2023.
- 30 hours FDP on: "Cyber Security" organized by Bharathi Institute of Technology on 25th Sep 2023.
- One-week Faculty Development Program (FDP) on "Latest Trends and Techniques in Digital Twin" 7th October 2024 - 12th October 2024

STTP Attended:

- One Week STTP on "Advances in Mobile system" organized by computer department of Fr.C.R.I.T. Vashi January 18- January 22, 2010.
- One week STTP on "Advanced Web Technologies" organized by SAKEC.
- One week AICTE Sponsored STTP on "Component Technology" organized by computer Department of Fr.C.R.I.T , vashi from Dec-17-Dec 22, 2007.
- 5 days STTP on "Digital and Cyber Forensics" from 28th Dec 2015 to 2nd Jan 2016, at Fr.C.R.I.T, Vashi.
- One week ISTE approved STTP on "Data Science and Bigdata Analytics" at Fr.C.R.I.T, Vashi from 19th Dec to 24th Dec- 2016.
- One week STTP on "Hands-on Cross Platform Mobile Application Development and IoT" at Fr.C.R.I.T, Vashi from 7th May – 11th May, 2018.

	- One week AICTE and ISTE approved STTP on "IoT with Data sciences" in 2019 conducted by FCRIT, Mumbai. - Attended five days online STTP on "Recent Trends and Applications of Machine Learning and Deep Learning in IT" organized by RAIT, Nerul 8th – 13th June 2020. - Attended one week STTP on **"Python Basics MachineLearning &Blockchain"** Organized by K.J. Somaiya Institute of Engineering Mumbai, from 8th – 13th June - 2020. - One week STTP on "Digital Transformation in Teaching Learning Process organized by at Fr.CRIT, Vashi 18th to 22nd January, 2021. - Attended 5 days STTP on **"Demystifying Deep Learning"** organized by Fr.CRIT from 02nd January 2023. - "SecureBloc: A Hands-On Journey into Cybersecurity and Blockchain" ISTE Approved One Week STTP organized by Vidyalankar from 01, July, 2024–05 July, 2024. **<u>Seminars/Workshops Attended:</u>** - One Week Workshop on "Computer Networking & Security" organized by Department of Computer Technology, VJTI from December 20th -25th, 2010. - Two Week Workshop on "Introduction to Research Methodologies" organized by Indian Institute of Technology Bombay from June 25thJ -July 04th, 2012. - One-day Workshop on "Internet of Things" on 8th Jan 2016, at VJTI, Matunga. - Three days online Workshop on "Education 4.0-Season-II" organized by IQAC, Atharva College of Engineering 28th – 30th May 2020 .
	<u>Patent Registed:</u> - Automatic Lip-Reading and Sentence Predicting Device Patent Application Number: 362440-001. - A multi-step randomized SALT technique for confidentiality in IoT devices, utility model no. 202023 104060, German patent
13.	**List of Journal Papers Published (list in IEEE format)**

	1	Automatic Wheelchair using Gesture Recognition	International Journal of Engg. And Innovative Technology-IJEIT, Volume2, Issue9, ISSN:2277-3754, March-2013.
	2	RFID Based Toll Collection System	International Journal of Computer Science and Information Technologies ,(IJCSIT),Volume 5 ,Issue 2 , Page No 2582-2585, April 2014.
	3	Implementation of RFID Based Toll Collection System	International Journal of Enhanced Research in Management & Computer Applications, ISSN No: 2319-7471 ,Volume 3 ,Issue 10 ,October 2014 ,Pg No .6-12
	4	Devanagari to English Converter	International Journal of Computer Application, Volume 1, Issue 5 ,ISSN: 2250-1797 ,Page No :91-101
	5	Anti-Theft Location Detection Chip	International Journal of Advanced Research in Computer Engineering and Technology(IJARCET), Vol 4 ,Issue 9 , Sept-2015, Pg. No. 3592-3595
	6	Image Framework for Library Application	International Journal of Scientific & Engineering Research, Volume 7, Issue 2, February-2016 1361 ISSN 2229-5518.
	7	Anti-Theft Tracking And Location Detection	International Journal of Computer Engineering and Applications, Volume X, Issue IV, April 16
	8	Predictive Modelling in Campaign Management	International Journal of Advanced Research in Computer Engineering & Technology (IJARCET) Volume 5, Issue 10,October 2016 , ISSN 2278-1323 ,Page No 2488-2491
	9	A Virtual Environment Forensic Tool	International Journal of Cyber Securit and Digital Forensics, ISSN-2305-0012, pp. 63-71
	10	Eye(I) Still Know! –An App for the Blind Built using Web and AI	International Journal of Engineering and Management Research (IJEMR) Volume -11, Issue-2 (April 2021) ISSN: 2250-0758	p-ISSN: 2394-6962 https://doi.org/10.31033/ijemr.11.2.

14.	List of Papers Published in National and International Conferences		
	Sr. No.	Title of the paper	Details of Publication
	1	"Application of RFID Technology in Real World Games"	In the proceedings of National Conference on Innovations in Electronics and Information Technology (IEIT-2009) held on Oct 05-06,2009
	2	"RFID Technology and Application"	In the proceedings of National Conference on Recent trends in Engineering and Technology ZENITH-2009 held on Oct 30-31,2009
	3	"Mobile Phone Cloning"	In the proceedings of National Conference on Pervasive Computing 2010 held at Singhgad College of Engg.,Pune on April 9-10
	4	"Vital Registration System"	In the proceedings of National Conference on Pervasive Computing 2010 held at Singhgad College of Engg.,Pune on April 9-10
	5	"Billing Edge"	In the proceedings of National Conference on Pervasive Computing 2010 held at Singhgad College of Engg.,Pune on April 9-10
	6	Bluetooth security	In the proceedings of

		7	Hand gesture recognition	In the proceedings of International Conference on Global Computing 2011 held at Sangamner on March 3-4,2011	
		8	Hand Gesture Recognition	International Conference on Recent Advances & Challenges in Engineering and Management,VIT RACEM-2013, Jan 11-12,2013	
		9	Deriving Insights and Analysis for Campaign Management"	5 th National Conference & Exhibition February 19th - 20th ,2018 Jointly Organized by Indian Institute of Technology, Kharagpur Govt. College of Engg. & Technology, Jammu Published in International Journal of Scientific and Technical Advancements ISSN: 2454-1532	
		10	Gesture Glove	International Conference ,ICIRTE 2017 Padmabhushan Vasantdada Patil Pratishthan College of Engineering ,Mumbai	
			Drones for Assistance in Emergency Situations	8th National Conference on Wave Mechanics and Vibrations (WMVC -2018) 26 –28 November, 2018 at NIT, Rourkela	
15.		11	Android Controlled Wheelchair	First International Conference on Secure Cyber Computing and Communications at NIT Jalandhar, December 15-17, 2018.	
		12	Swarm Robotics in Disaster Management	IEEE International Conference on Innovative Sustainable Computational Technologies (CISCT-2019) on October 11-12, 2019 at Graphic Era Deemed University, Dehradun, Uttarakhand, India, IEEE Conference Record No. 46613.	
		13	Inter AR: Interior Decor App using Augmented Reality Technology	5th International Conference on Cyber Security & Privacy (ICCS) 29th -30th Nov-2019 at NIT Kurukshetra , ISSN: 1556-5068	
		14	Smart Campus: A modern approach for enriching the campus experience	International Conference "Latest Trends in Civil, Mechanical and Electrical Engineering" (LTCMEE- 2021), April 12-13, 2021 Maulana Azad National Institute of Technology, Bhopal.	
		15	Study on Design and Implementation of Distributed Multiple Camera Surveillance and Tracking System	2nd International Conference on Automation Computing and Communication (ICACC2021) Ramrao Adik Institute of Technology, Nerul, Navi Mumbai, Maharashtra July 14-15, 2021.	
		16	An application to Improve Mental Health	2nd International Conference on Automation Computing and Communication (ICACC2021) Ramrao Adik Institute of Technology, Nerul, Navi Mumbai, Maharashtra July 14-15, 2021.	
		17	Sky Detection in Outdoor Spaces	International Conference on Data Science and Artificial Intelligence (ICDSAI 2022) Indian Institute of Technology, Patna 24th-25th April ,2022	
		18	M-Lens An IoT Based Deep Learning Device	7th International Conference on Internet of Things and Connected Technologies , Indian Institute of Technology, Patna, 29-30 September 2022.	
		19	Stress Reliving Application for Personal Wellbeing	7th International Conference on Internet of Things and Connected Technologies , Indian	

			Institute of Technology, Patna, 29-30 September 2022.
	20	Venture Analyzer	7th International Conference on Internet of Things and Connected Technologies , Indian Institute of Technology, Patna, 29-30 September 2022.
	21	Electronic Matadan: Blockchain Based E-Voting System	5th Biennial International Conference on Nascent Technologies in Engineering (ICNTE 2023), Fr. C. Rodrigues Institute of Technology, Navi Mumbai, India,20-21 Jan,2023
	22	A Systematic Study On Cybersecurity Technologies Issues and Its Challenges	International Conference on Intelligent Computing and Networking(IC-ICN 2023) , 24th -25th February 2023
	23	OCR-Based Text Information Retrieval and Translation From Pictures and Videos	4th International Conference on Multidisciplinary Innovation in Academic Research (ICMIAR 2023), Institute For Engineering Research and Publication, Chennai, India,17-18 March,2023, pp33.
	24	E-Learning Platform for Medical Students	National Bioengineering Conference 2023 (NBC), Nov 2023.
	25	Transfer Learning-Based Recommendation System	6th International Conference on Advances in Science and Technology (ICAST-2023), K. J. Somaiya Institute of Engineering & Information Technology, 8th and 9th December, ISBN: 979-8-3503-5981-7,2023.
	26	A Study on Cyberbullying Detection Techniques in Online Social Networks	6th International Conference on Advances in Science and Technology (ICAST-2023), K. J. Somaiya Institute of Engineering & Information Technology, 8th and 9th December, ISBN: 979-8-3503-5981-7,2023
	27	IoT Attacks, Security Concerns, and Reinforcement Learning Solutions: A Comprehensive Survey	First International Conference on Emerging Research in Computing, Information, Communication, Artificial Intelligence and Machine Learning (ERCICAM-2024), Nitte Meenakshi Institute of Technology (NMIT), Yelahanka, Bangalore, India, 23-24 February 2024, accepted paper and it will be published in Springer – LNEE series (Lecture Notes in Electrical Engineering).

1. International Conference Technical Program Committee Member / Reviewer for the 2nd Biennial International Conference on Nascent Technologies in Engineering", organized by FCRIT, Vashi in 2017

2. International Conference Technical Program Committee Member / Reviewer for the 2nd Biennial International Conference on Nascent Technologies in Engineering", organized by FCRIT, Vashi in 2019

3. International Conference Technical Program Committee Member / Reviewer for the 3nd Biennial International Conference on Nascent Technologies in Engineering", organized by FCRIT, Vashi in 2021

4. International Conference Technical Program Committee Member / Reviewer for the 5th IEEE - International Conference on Advances in Science & Technology (IEEE-ICAST - 2022) organized by K. J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai, in association with University of Mumbai and Technically Sponsored by IEEE Bombay Section on 2nd and 3rd of December 2022.

5. International Conference Technical Program Committee Member / Reviewer for the 5th Biennial International Conference on Nascent Technologies in Engineering", organized by FCRIT, Vashi in 2023

6. International Conference Technical Program Committee Member / Reviewer for the 3rd International Conference on Advanced Computing Technologies and Applications-2023(ICACTA), organized by SVKM's Dwarkadas J. Sanghvi College of Engineering on the 6th and 7th of October 2023

7. International Conference Technical Program Committee Member / Reviewer for the 6th International Conference on Advances in Science and Technology (ICAST-2023)" organized by K. J. Somaiya Institute of Technology, Sion, Mumbai, in association with the University of Mumbai, India, and technically co-sponsored by IEEE Bombay Section, India on 8 th & 9th December 2023.