

## RESUME

27, Suman Castle, Flat no 302,  
Hindustan Colony, Near LIT Campus  
Amravati Road, Nagpur-33

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**Name:** Dr. Rajeshree Digambarrao Raut  
**Designation :** Associate Professor & Dean (SA), GCOE, Nagpur  
Executive council Member, ISTE, New Delhi  
Fellow IET, Fellow & Executive Council Member IETE,  
**Qualification:** BE Electronics & Telecommunication  
ME Electronics  
PhD Wireless Communication  
**Moto:** **Work is Worship**



### GENERAL INFORMATION:

Full name of the applicant (Surname, Name & Middle name / father's name)	Raut Rajeshree Digambarrao
Date of Birth ( in DD/MM/YYYY) format	02/08/1976
Present post	Associate Professor and Head Electronics & Telecommunication, Government College of Engineering Nagpur
Designation and Grade:	Associate Professor in Electronics & Telecommunication, 13 A
Date from which Held:	1/8/2019
Name of the Organization:	Government College of Engineering Nagpur
Address for communication:	Plot No 27, Flat No 302, Hindustan colony, Amravati Road, Near LIT, Nagpur-440033
E-mail Id:	<a href="mailto:rautgcoen@gamil.com">rautgcoen@gamil.com</a> <a href="mailto:rdraut@gcoen.ac.in">rdraut@gcoen.ac.in</a>
Telephone numbers for contact:	
Office	07103-295226
Residence:	9022113964
Mobile:	9822797046
The Indian language the applicant is able to speak fluently and read	English/Marathi/Hindi
Knowledge of Marathi Language (Read/Write/Speak)	All three Read/ Write and Speak

<b>Essential Qualifications : (Graduation onwards) :</b>							
<b>Sr. No</b>	<b>Examination</b>	<b>Board / University</b>	<b>Institute</b>	<b>Subject / Course</b>	<b>Year of Passing</b>	<b>Division / Class</b>	<b>Marks in %</b>
1	B.E.	Amravati	Govt Engg. Amravati	Electronics & Telecommunication	1998	I	73
2	H.N.C.	Amravati	NIIT	Unix, Sybase, C++	1999	I	82
3	M.E.	Amravati	Govt Engg. Amravati	Electronics	2002	I	61
4	PhD	Nagpur	Ramdeobaba College of Engg. Nagpur	Wireless Communication	2011	NA	NA

**Details of Employment in Descending Order :** (all proofs of approvals of appointments of different positions from the competent authorities like Affiliating University / DTE to be enclosed)

<b>Sr. No</b>	<b>University / Institution / Organization</b>	<b>Post</b>	<b>From</b>	<b>To</b>	<b>Government / Private</b>	<b>Total ( in year and months )</b>	
1	Government college of Engineering Nagpur	Associate Professor and Dean SA/Head ETC/Dean CA	8/1/2019	Till date	Government	5 years	
2	Shri Ramdeobaba College of Engineering and Management	Professor and Head, EDT	1/7/2016	7/1/2019	Private	2 years 6 months	
3	Shri Ramdeobaba College of Engineering and Management	Associate Professor	01/09/2010	30/06/2016	Private	5 Years 10 Months	
4	Shri Ramdeobaba College of Engineering and Management	Assistant Professor	29/08/2007	31/08/2010	Private	3 Years	
5	Shri Ramdeobaba College of Engineering and Management	Senior Lecturer	18/01/2007	28/08/2007	Private	7 Months	
6	Shri Ramdeobaba College of Engineering and Management	Lecturer	03/08/2005	17/01/2007	Private	1 Year 5 Months	
7	MSEB	Junior Engineer	14/01/2004	16/07/2005	Government	1 Year 6 Months	
8	Government college of Engineering Amravati	Lecturer	29/09/2001	13/01/2004	Government	2 Years 3 Months	
9	Government college of Engineering Jalgaon	Lecturer	17/04/2000	28/09/2001	Government	10 Months	
10	Government college of Engineering Amravati	Visiting Lecturer	July 1998	16/4/2000	Government	1 year 9 months	
11	NIIT Ctronics	Faculty			Private	1 Year 6 Months	
<b>Total Experience : :</b>					<b>24 Years 8 Months</b>		

<b>Details of Administrative Experience :</b> ( Proofs of certificates from the appointing authority / Principal/Director of the institute / etc. be attached)							
<b>Sr. No .</b>	<b>University / Institution / Organization</b>	<b>Post</b>	<b>Natureof Duties</b>	<b>From</b>	<b>To</b>	<b>Government / Private</b>	<b>Total ( in year and months )</b>
1	Government College of Engineering Nagpur	Head of department of ETC	Admin, Organization, Academic & Research	11/8/2021	Till date	Government	2years 1 month
2	Government Engineering Nagpur	Dean Students	Student Admin and Extra Curricular activities	10/1/2019	18/11/21	Government	2 years 10 months
3	Government Engineering Nagpur	RTI officer	Admin	30/11/2021	Oct 2023	Government	1 Year 11 Months
4	Government Engineering Nagpur	Libraray Incharge	Day to day Administration of library and Upgradation	18/11/2021	Oct 2023	Government	1 Year 11 Months
5	Government Engineering Nagpur	MHCET DLO (District Link Officer)	Complete Management and successful conduction of MHCET Exam 2022	July 2022	Oct 22	Government	3 Months
6	Government Engineering Nagpur	NAAC Co-Coordinator	Admin, academic and research	7/11/2022	Till date	Government	10 Months
	Government Engineering Nagpur	Prof Incharge Alumni Association	Admin, Coordination	Jan 2021	Nov2022	Government	1 year 11 months
6	Shri Ramdeobaba College of Engineering & Management	Head of Department of EDT	Admin, Organization, Academic & Research	1/7/2016	7/1/2019	Private	2 Years 6 Months
7	Shri Ramdeobaba College of Engineering & Management	Associate Dean R&D	Research & Management	May2011	April 2013	Private	1 Year 11 Months
8	Shri Ramdeobaba College of Engineering & Management	OIC Spot	Admin	Summer-2013exam		Private	
<b>Research Publications:</b> (Provide a list of minimum eight (8) publications in SCI journals / UGC / AICTE approved list of journals out of which please include the research publications in peer-reviewed/ refereed international research journals with high impact factor after Ph.D.)							
<b>Sr. No .</b>	<b>Title of the publication</b>		<b>Name of the Journal (do not include conference publications)</b>			<b>Year of Publication</b>	
1	“Bacterial Foraging Optimization of Speech Coder for Software Defined Radio”,		Journal of Intelligent & Fuzzy System. Accepted ISSN 1064-1246/1875-8967, H-index46 <b>SCI-indexed</b>			2021	

2	"AI-enabled turbo-coded OFDM system for improved BER performance",	Journal of Supercomputing, Springer publication, April 2018, ISSN 1573-0484, 16 April 2018 (SCI), Impact Factor 1.532	2018
3	"Hardware Based Application of Data Security System using general modified-secured diamond encoding embedding approach for enhancing imperceptibility and authentication"	April 2019, Vol 78, Multimedia Tools and Application, Springer publication, ISSN 1380-7501 print, 1573-7721-e version, <b>SCI-expanded</b>	2019
4	"Anti Forensic Reversible Multi Frame Block Pixel Mapping Information Cocealing Approach to Increase Robustness and Perceptibility",	IJICS, Inderscience Journal, Paper accepted, <b>Indexing I.F=1.2, , Acceptance date 29/03/2019. (Free Journal , IF.= 1.2.Scopus Indexed, RG Journal Impact: 1.10,H index = 9)</b>	2019
5	"Information Security Model Using Data embedding technique for enhancing perceptibility and robustness",	Int. J. Electronic Security and Digital Forensics, vol11, 2019, PP-70-75, Inderscience publication, <b>Jan. 2019 ( IF.= 1.2.Scopus Indexed, RG Journal Impact: 1.10,H index = 9)</b>	2019
6	"A study of Codebook Design Techniques in SCMA"	IJCA, International Journal of Control & Automation, ISSN-3207-6887 e, <b>scopus</b>	
7	"Encoders for SCMA"	IJRTE , Vol7, Feb 2019, ISSN:2277-3878	2019
8	"Multi -Objective Channel Decision for Adhoc Cognitive Radio Network", ,	International Journal of Electronics & Telecommunication, DOI-10.24425, April 2019	2019
9	"Design & Implementation of Reconfigurable Modulator Using FPGA for Cognitive Radio System"	Helix, Journal Vol 8(6), 4418-1125, web of Science-P-ISSN -2277-3495, 2018	2018
10	"Trust establishment in chaotic cognitive environment to improve attack detection accuracy under primary user emulation"	Iranian Journal of Science and Technology, Transactions of Electrical Engineering, Volume 42, Issue 3, Pages 291-297, Publisher Springer International Publishing (SCOPUS Indexed, SCI-Expanded), 27 June 2018.	2018
11	Innovative data security model using forensic audio video steganography for improving hidden data security and robustness"	International Journal of Information and Computer Security, Volume 10, Issue 4, Pages 374-397, Publisher Inderscience Publishers (IEL) ( <b>SCOPUS INDEXED</b> ), in Sep, 2018	2018
12	Innovative Data Hiding Security Model using Forensic Audio Video Crypto-Steganography.	ICTACT International Journal on Commendation and technology, Vol.8, No.4, 1633-1639, Oct.2018 (Free Journal, IF.= 0.85, <b>Indexed in web of science</b> , RG Journal Impact: 1.10,H index = 9)	2018
13	Hybrid Spectrum Sensing Technique for Cognitive Radio",	International Journal of Electrical and Computer Engineering, ISSN: 2088-8708, , Oct 2017, SJR 1.09, Scopus Indexed	2017
14	"Efficient Performance Analysis of Data Hiding Technique for the Enhancement of Information Security, Robustness and Perceptibility"	International Journal of Electronics Security and Digital Forensic (IJESDF Inderscience), Vol.7, No.4, pp. 305-329, June 2015, Indexing (Thomson Reuters , Scopus, <b>Web of Science</b> , Google Scholar).I.F 0.2, (Citation 4), ISSN: 1751-9128	2015
15	"Traditional Psychoacoustic Model And Daubechies Wavelet For Enhanced Speech Coder Performance",	IJTech, April 2015, Vol. 6, No. 2 pg. No. 190-193,ISSN : 2086-9614, <b>Indexing</b> (SCOPUS, <b>SCI</b> Imago, Google scholar, DOAJ, EBSCO, GISI, Directory of Research Journal Indexing (DRJI), has been accepted for coverage in selected Elsevier product(s), and a member of CrossRef.) <b>H Index- 2.(Citation-6)</b>	2015

16	Irregular SCMA Codebook Design Approaches	Wireless Personal Communication, Springer publications	2023
17	“Optimized Adaptive Speech Coder for Software Defined Radio”,	International Journal of Computer Aided Engineering and Technology, ISSN: 1757-2665, Inderscience Publication	2019
18	“A Novel Chaotic Communication Based Test Signal Approach for Identification of Primary User Emulation Attack in Cognitive Radio Networks”,	International Journal of intelligent Engineering and Systems, ISSN: 2185-3118, Cite Score from Scopus website for 2017 is 0.47	2017
19	To Mitigate with Trusted Channel Selection Using MOORA Algorithm in Cognitive radio Network	Iranian Journal of Science and Technology, Transactions of Electrical Engineering, Volume 45, Pages 381-390, Publisher Springer International Publishing (SCOPUS Indexed, SCI -Expanded), oct 2020	2020
20	An Introduction to Neural Networks in SCMA	Wireless Personal Communications, Vol 119, Pages 509-525, Springer	2021
21			

#### Details of Published books / Book Chapters

Sr. No.	Title of the book / book Chapters	Name of the Publisher	ISBN
1	Error Control Coding; For Performance Improvement in Cognitive Radio	LAP Verlag Academic Publishing, August 17, 2012.	978-3-659-20051-9978-3-659-20051-9
2	Cognitive Radio: Basic Concepts, Mathematical Modeling and Applications	CRC press, April 7, 2020	978-0367368586 1.
3	978-81-322-2726-7 Microelectronics, Electromagnetics and Telecommunications	(ICMEET) 2015, Lecture Notes in Electrical Engineering (LNEE), Chapter No12, pp., 121-134, December 2015,	978-81-322-2726-7

#### Details of funded research / developmental projects for min. Rs. 5 Lakhs and above (Completed / in – Process)

Sr. No.	Title of the Project	Project Value (Rs. In Lakh)	Granting Agency	Date of Start	Date of Completion
1	Cattle Health Monitoring System	1 lakh plus around 40 thousand from VNIT	UBA and VNIT	Jan 2021	11/3/2022
2	Design of Automatic Multifrequency Selective Antenna	2lakhs (Man-machine hours)	Industry- Inotek Antennas Pvt. Ltd	2013	2014
3	PSK system Design in Cognitive Environment	Man-machine hours	Amitec Electronics	2015-	2016
4	FM system Design in Cognitive Environment	Man-machine hours	Amitec Electronics	2015-	2016
5	EEG data Compression for Remote PMS	75,000/-	RTMNU	2013	2015
6	Night Vision Drone	4000 per month Stipend to each member	Solar Industries India	26/3/2021	July 2022

		throughout the project tenure			
<b>Experience to Guide Ph. D Students :</b>					
<b>SN</b>	<b>Student</b>	<b>Thesis title</b>	<b>Ph.D. awarded</b>		
1	Sunil Moon	To study and Simulate the Innovative Video Crypto-Steganography using Computer Forensic Technique for Enhanced Data Security	Awarded		
2	Seema Taywade	A Real Time EEG data compression and Transmission for Remote Patient Monitoring System	Awarded		
3	Raghavan Madbushi	A Novel and secure two layer approach to mitigate primary user emulation attack in Cognitive Radio	Awarded		
4	Awani S. Khobragade	Experimental studies for Optimized Spectrum Sensing Techniques in Cognitive Radio	Awarded		
5	Priti Subramaniam	Optimization of Adaptive Coding Technique to improve BER in OFDM System	Awarded		
6	Sheetal Gunjal	Adaptive Source Encoder for SDR in Cognitive Radio	Awarded		
7	Rahul Awthankar	Development Of An Efficient Low Complexity Channel Decision Model With Conflicting RadioNetwork	Awarded		
8	Madhura Kulkarni		Submitted		
<b>Details of Experience of Working with International Bodies, Participation in Workshops, Seminars, and Conferences held Outside Country :</b>					
<b>SN</b>	<b>Activity</b>	<b>Place</b>	<b>Year</b>		
1	Paper presentation on “Internet of Things”, International Conference on Sustainable Growth Through Innovation & Technology, SGIMT, Dubai, 18-19 Oct 2016	Dubai,	18-19 Oct 2016		
2	Paper presentation & <b>Session Chair</b> , Paper title “SDR Design for Cognitive Radio”, <i>ICMSAO'11, International Conference on Modelling &amp; Simulation, UTM, Kuala Lumpur Malaysia</i> , 19-21 April 2011 (citation-13), Scopus Cited.	<i>Kual Lumpur Malaysia</i>	19-21 April 2011 19-21 April 2011		
3	Paper presentation on BER Performance Maintenance at High Data Rates in Cognitive Radio”, The 20 <sup>th</sup> International Conference CONIELECOMP 2010, UDALP, Puebla, Mexico, Feb 24, 2010, scopus cited	UDALP, Puebla, Mexico	, Feb 24, 2010		
4	Paper presentation on “Spectrum Sensing Smart Codec Design for Cognitive Radio”, <i>The 8<sup>th</sup> WSEAS International Conference on System</i>	<i>Genova, Italy,</i>	<i>Oct17-19, 2009</i>		

	Science and Simulation in Engineering”, Genova, Italy, Oct 17-19, 2009. Scopus Cited Nominated in the best 30% papers, submitted to the conference		
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**Details of Experience of Working with International Bodies, Participation in Workshops, Seminars, and Conferences held Within the Country :**

SN	Activity	Place	Year
1	Session Chair for IEEE International Conference ICCIC	Chennai.	Dec 15- 16, 2016,
2	Chaired Session at ICTETEC 2017,	PCE, Nagpur	2017
3	Session Chair ICESC, International Conference-2014,	RCOEM Nagpur in association with MIT USA	Jan 9 <sup>th</sup> to 11 <sup>th</sup> 2014
4	Session Chair, International Conference ITAC-2012,	YCCE Nagpur in association with Hartford University, USA	1 <sup>st</sup> Feb., 2012
5	<b>Reviewer for IEEE International Conference TENCON-2009.</b>	Singapore	2009
6	<b>Reviewer for WSEAS International Conferences,</b>		<b>2009-10, 2010-11</b>
7	<b>Reviewer for Hindawi Publication , InderScience Publications , Elsevier Journals</b>		<b>Tilldate</b>
8	<b>Reviewer for IEEE Communication Letters</b>		<b>Tilldate</b>
9	<b>Advisory Board Member , IJEIT</b>		<b>Tilldate</b>
10	<b>Reviewer &amp; Advisory Board member for the International Journal IJCTEE</b>		<b>Tilldate</b>
11	<b>Reviewer &amp; Editorial Board member for the International Journal WET</b>		<b>Tilldate</b>
12	<b>Editorial Board member for the International Journal IJACS.</b>		<b>Tilldate</b>
13	<b>Reviewer for the International Open Access Journal IJCA and appointed on its Editorial panel.</b>		<b>Tilldate</b>

**Experience of working on the Statutory Authorities/forums of a university/institute such as Board of Studies, Academic Council, Management Council or Executive Council of Board of Management, Senate, AICTE / UGC / NBA / NAAC etc.**

SN	Institution	Statutory forum / authority and position	From	To	Total (Y/M)
1	RTMNU Nagpur University	Board of Studies Member for Electronics Board	25/11/22	Till date	10 months
2	ISTE	National Level Executive Council Member	2019	Till date	4 years
3	ISTE	State Management Council (SMC) member	2015	2017	2 years
4	IETE	Executive Council Member for Nagpur Region			

**Awards and Recognitions :**

SN	Title and details of the award	Year
1	Outstanding Researcher award by INSO	2023
2	Nagpur City Mayor Award as <b>women Achiever 2019</b> , awarded on 8 <sup>th</sup> march 2019	2019
3	<b>National Award for Outstanding Research work</b> in Engineering, in recognition for work done in the area of Cognitive Radio Communications, by ISTE, 27 Jan , 2018	2018
4	Project Guided “ PSK System Design in Cognitive Environment” has received a <b>Best Engineering Project award</b> by ISTE on 17 <sup>th</sup> February 2017 organized by Bharati Vidyapeeth University, Pune	2017
5	Indian Society for Technical Education (ISTE), has awarded the prestigious, “ <b>Shayesta Akhtar Memorial National Award for Best Engineering College Teacher for the year 2013</b> ”	2013
6	‘ <b>Ideal Teacher Award</b> ’, of RTM Nagpur University, for <b>outstanding contribution in Technical education</b> , 4 <sup>th</sup> August 2011	2011
7	‘ <b>Shiksha Rattna Award</b> ’, for Meritorious Services, Outstanding Performance & Remarkable Role, given by IIFS, New Delhi, 26 <sup>th</sup> May 2011	2011
8	‘ <b>Best Citizen of India.</b> ’, Award given by Best Citizen Publishing House, of India for Research contribution in the field, 28 <sup>th</sup> May 2011	2011

#### Membership of Technical Societies :

SN	Name of the Society	Membership Number	Period
1	IEI	Fellow	
2	IETE	Fellow and Executive Member	

#### Any Other Information :

1. Around 70 expert Talks , including Keynote address, Plenary Talk at different parts of the country
2. Coordinator of 4 sponsored STTP , grant of 1lakh, 3 lakh, 1.80 lakh, and 93 thousand. Also coordinated self financed STTP
3. Convener of National Level student symposium like Adhaaya, Technovision for 3 years
4. Received DST travel grant for Paper presentation at Kaulalampur Malaysia
5. Six Patents published, one granted.
6. Publications – 124 , Citations -300 plus, H-index-9, I-10 index-8

#### Skills and Competencies :

##### Leadership Skills – Proven record

1	Ability to motivate a diverse group of stake holders
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	Communication skills, cordial relation, a strong academic profile, with passion for work has always created a good impact on students, parents , employers, visitors. All this was obvious while handling tasks like the MHCET DLO, Drone Club Incharge, TRISHAKTI club , Adhaaya, Technical club etc. Have earned positions like the only lady from Maharashtra state as National level Executive council Member of ISTE.		
<b>2</b>	<b>Desire to further the mission and goals of the organization</b>		
	Involved in Department as well as central ad Regional level activities for creating an environment conducive for technical development and moral building towards societal service Motivated students for Participation in Mayors Hckathon, Flipcart, etc, students also won prizes.		
<b>3</b>	<b>Ability to think strategically and innovatively and to maintain a broad perspective</b>		
	UBA funded Project CHMS ranked first in Vidarbha and was presented at IIT Delhi. For Defense aspirants in the college started the TRISHAKTI club.		
<b>4</b>	<b>Ability to lead by personal example with openness to new ideas and a consultative approach in implementation of the same</b>		
	While leading by example as Head ETC, conducted/ motivated/ supervised year round activities for overall personality development of the students of the institution, students in and around Nagpur. Organized the first of its Kind Donation drive for Old age home and orphanage. As Dean students organized The first of its kind 'INFO MANIAC', to promote Engineering Education. While maintain a continuity in extra and co-curricular activities also proved academic sincerity by getting highest rated by students in academic feedback.		
<b>5</b>	<b>Understanding NEP2020 and its implementation plan for the institute</b>		
	Delivered lecture on NEP 2020 at GNIT Nagpur and home institution. Attended workshops and meetings on NEP implementation, involved actively in the framing of Syllabus and cluster formation for NEP implementation.		
<b>PEFRERENCES (Attach minimum three (3) Reference letters)</b>			
<b>SN</b>	<b>Name</b>	<b>Designation</b>	<b>Address, mobile and email</b>
<b>1</b>	Dr. Abhay Wagh	Member of MPSC	
<b>2</b>	Ravindra Thakre, IAS	Additional Tribal Commissioner, Nagpur	Tribal Bhavan, Giripeth , Amravati Road , Near RTO , Nagpur 44022 Mobile : 7709741106
<b>3</b>	Dr. A. Ghatol	Ex. VC , Babasaheb Ambedkar Technological University, Lonere, Tal- Mangaon, Dist – Raigad. Maharashtra (India). 402103	Jagdish Nagar , Building No. 6 , Ganesh Khind Road , Aund , Pune 7 Mobile No : 9637899113 mail id : vc_2005@rediffmail.com

I certify that the information given above is true to the best of my knowledge.

**Date :**

**SIGNATURE OF APPLICANT**