Mahatma Jyotiba Phule Rohilkhand University, Bareilly
महात्मा ज्योतिबा फुले रूहेलखण्ड विश्वविद्यालय, बरेली
A State University - Government of Uttar Pradesh; **NAAC A++ Accredited**; ISO 9001:2015 & 14001:2015 Certified

G20

Faculty Profile

Title	Dr.	Manish	Rai		Photograph
Designation	Professor				
Department	Electronics & Communication Engineering				
Mobile No.	9412518363				

Email ID	Personal	manishrai1968@gmail.com
	University Domain	m.rai@mjpru.ac.in
	Linkedin	**linkedin.com/in/manish-rai-18a96877**

Educational Qualifications (Graduation Onwards)

Course/Degree	Institution	Year	Details/Thesis Topic/Subjects
B.SC(Two Years)	Avadh University, Faizabad, UP 1984-1986 PCM	1984-86	PCM Group
B.Tech	University of Allahabad, Allahabad	1987-1990	Electronics and Telecommunication Engg.
M.Tech	University of Allahabad, Allahabad	1991-1993	Electronics Engg.
Ph.D	Motilal Nehru Regional Engg. College (University of Allahabad,a central university Allahabad)	2006	Performance of CDMA Techniques in Wireless Networks

Career Profile

Organization / Institution	Designation	Duration	Nature of Duties
MJP Rohilkhand University, Bareilly	Professor and Head, Deptt. of EC Engg. , Faculty of Engineering&	Joined as a Professor in Year 2019 w.e.f Year 2012. To til, Date	Teaching & Administrative Both

	Technology		
Galgotias College of Engineering and Technology, Greater Noida ,UP (02 years extra ordinary leave)	Professor and Head, Department of Electronics & Communication Engineering	(02 years extra ordinary leave) 1 st July 2011 to 1st July 2013.	Teaching & Administrative Both
M.J.P. Rohilkhand University, Bareilly (U.P)	Worked as an Asstt. Prof. and Associate Prof. from 1996 to 2019.	from 1996 to 2019. 1. From 4th June 1996 – 26th June 2009 as Asstt. Professor. 2. From 26th June2009 to 26th June 2012 as Associate Professor	Teaching & Administrative Both
Shri Mata Vaishno Devi University, Jammu & Kashmir (extra ordinary leave)	Associate Professor, a technical university owned by J&K Government.	March 2008-July 2008 Teaching	Teaching
C.R.State Engg. College, Sonipat,	Haryana Visiting faculty	Aug.1995- May1996.	Teaching

Research Interests / Specialization

Wireless Broadband Communication, VLSI Design and Circuits.

Teaching Experience (Subjects/Courses Taught)

29 Years of teaching Experience

Subjects: V.L.S.I. Design & Circuits, Analog Communication, Digital Communication, Spread-Spectrum Communication

Details of Publications /Academic Activities

Researcher/ Expert ID		ORCiD				Publons		Google Scholar	
		0000-0003-4220-6368							

Books & Monographs (Single Author)	Nil	Research Papers Published in International Journals	16	Papers Presented in Seminars/ Conferences	18	Seminars/ Conferences Organized	01	Research Projects (Completed)	2
Books (Coauthored	Nil	Research Papers Published in Other Journals	Nil	Seminar/ Conferences Attended	19	Workshops Organized	10	Research Projects (Ongoing)	1
Books (Edited)	Nil	Articles Published in Popular Fora, e.g., Websites, Blogs, Newspapers, Magazines etc.		Sessions Chaired in Seminars/ Conference	nil	Membership of Academic / Professional Bodies	6	Foreign Countries Visited for Academic Assignments	Nil
Chapters in Edited Books	Nil			Resource Lectures Delivered	4				

(a) Authored Books/ Monographs			
Name of Book	**Year of Publication**	**Publisher**	**ISBN No**
Nil			

(b) Edited Books					
Year of Publication	**Title**	**Publisher**	**ISBN**	**DOI No.**	**Citations**
Nil					

(c) Papers Published in UGC Care Listed /Indexed/ Peer Reviewed Journals

Year of Publication	**Title**	**Name of Journal**	**ISSN No**	**Citations**	**Impact Factor**

(d) Chapter/Paper Published in Edited Books

Publication		Title of the Book	Title of the Chapter	Name & Address of Publisher	Year	ISBN	DOI	Citation Google/ web of science
National	International							
Nil								

(e) Invited as Resource Lectures Person/Examiner/Expert

Resource person	**Detail of Event**	**Title of Lecture**	**Date**	**Institution**
Invited talk Session chair	International Conference, organized by Shri Rama Morti College of Engg. & Tech., Bareilly	Exploring the Potential of Convergence (Electronics and Communication Trap)	27 to 28 Feb. 2015	SRMS Bareilly.
Guest of Honour	National Conference, conducted by Shri Siddi Vinayak	Wireless Communication	12th March 2016.	Shri Siddi Vinayak Institure of Engg. & Tech, Bareilly

	Institure of Engg. & Tech				

(f) Seminars/Conferences/Workshops Organized

Conducted Short Term Course of 05 days on VHDL Design Tools in the Department of Electronics & Communication Engg in year 2012 at Galgotias College of Engineering and Technology, Knowledge Park-II, Greater Noida (UP) in collaboration with National Institute of Electronics & Information Technology(NIELIT), under Deptt. of Information Technology under the Ministry of Communication & Information technology, Govt. of India.

Conducted Staff Development Program (SDP) with financial assistance of Rs. 6 Lacs from AICTE, New-Delhi through letter No: RIFD/SDP/102/2011-12 at Galgotias College of Engineering and Technology, Knowledge Park-II, Greater Noida (UP) as a Coordinator.

Conducted a National Seminar with financial assistance of Rs. 75,000/ from AICTE, New-Delhi through letter No: 22/AICTE/RIFD/SEM/(policy 2) 10/2012-13, dt:4th December 2012 Galgotias College of Engineering and Technology, Knowledge Park-II, Greater Noida (UP) as a Coordinator.

Conducted a one day National Workshop sponsored by Cadence Design System , Bangalore on latest trends in VLSI design & systems at Galgotias College of Engineering and Technology, Knowledge Park-II, Greater Noida (UP).

Conducted National Seminar on Advances In Electronics & Communication Engg.(AECE-14) from 27th to 28th March 2014 as Organizing Secretary in deptt. of E&C Engg. at MJP Rohilkhand University, Bareilly sponsored by the World bank under TEQIP-II scheme.

Conducted 05 days Faculty Development program (FDP) on State of Art in RF and Wireless Communication Design under TEQIP-3 scheme of World Bank in association with BMS College of Engineering , Bangalore as Co-Convenor from 29th July -02nd August 2019.

Conducted 05 days Faculty Development program (FDP) on State of Art in RF and Wireless Communication Design under TEQIP-3 scheme of World Bank in association with BMS College of Engineering , Bangalore as Co-Convenor from 29th July -02nd August 2019.

Conducted 02 days workshop on Embedded Systems from 7-8th September 2019 under TEQIP-3 scheme of World Bank as Co-ordinator.

Conducted 02 days workshop on RTL using Verilog on Modelsim Tool from 19-20th October 2019 under TEQIP-3 scheme of World Bank as Head of Department.

Conducted one day expert lecture on Cognative radio on 15th October 2019 under TEQIP-3 scheme of World Bank as Head of Department.

(g) Projects (With Title, Year, Grants, Funding Agency and Collaborations)

Year	Name of Project	Funding Agency	Amount	Duration	
				From	Till

2019	Scheme on Capacity allocation planning for survivable INDIANET.	National Project Implementation Unit(NPIU) under Ministry of Human Resource Development , Govt. of India under TEQIP	Rs.7 lacs 23 Thousand	Year 2018	continue
2011		University Grant Commission(UGC) F.No: 39-991/2010(SR	**Rs.80,000**	Year 2011	02 years

(h) Administrative Positions/Assignments Held

Post	Organization	Duration	
		From	**To**
Served as Observer for conducting Various Entrance examinations conducted by the university from 1996.	M.J.P Rohilkhand University, Bareilly	Year 1996	Continue
External expert for M.Tech Programme	Gautam Budtha University (A UP Govt. University), Greater Noida (UP)	Year 2011	Continue
External expert for M.Tech Programme	G.B. Pant-Nagar University Pant Nagar, Uttrakhand.	Year 2011	Continue
Observer	National Institute of Electronics & Information Technology (NIELIT), under Deptt. of Information Technology under the Ministry of Communication & Information Technology, Govt. of India to conduct certification exams.	Year 2010	Continue

- **Seminar/Conference Presentations**
- "Performance Improvement Using GMSK Modulation Technique in Wireless Communication Networks" Published in First International Joint Conference on Information And Communication Technology(IJICT 2010),organized by Inter science Institute of Management & Technology, Bhubaneswar (Orissa) And University of Malaysia, Perlis, held on 9-10, January, 2010.

- Improvement In Power Updating Algorithm In Wireless DS-CDMA Networks" Presented in IEEE Sponsored International Conference ELECTRO-2009,held at I.T, Banaras Hindu University (A Central University) from 22-24th December 2009. Proceedings to be available on

IEEE explore with ISBN no: 13:978-0230-32851-8.

- Analysis of Constrained Distributed Power Balancing Algorithm in DS-CDMA Systems" Accepted in sixth IEEE conference on wireless communication and sensor networks WCSN" to be held at Indian Institute of Technology(I.I.T),Kharagpur from 10-12th December 2010.

- Some Investigation on slotted-loaded Equitriangular Microstrip Antenna" Presented to IEEE International Conference on wireless communication" at Motilal Nehru National Institute of Technology, Allahabad held from 17-19th, September 2010.

- Performance Improvement of DS_CDMA Wireless Communication Networks with Convolutionally Encoded OQPSK Modulation Scheme" published in International Journal of Advances in Engineering & Technology, March 2011, vol1, issue 1, pp.28-33, ISSN no: 2231-1963.

- Analysis of DS-CDMA System with Phase Synchronization Errors For Selection Diversity Scheme" accepted in 2011 2nd International Conference on Advances in Energy Engineering (ICAEE2011) sponsored by **Elsevier** to be held from 27th – 28th December 2011 in Bangkok, Thailand.

- Performance Improvement of DS-CDMA Wireless Communication Network with Convolutionally Encoded MSK Modulation Scheme ", published in Journal of Telecommunications (JOT), pp: 33-37, vol:10, issue:2, December 2011.

- Analysis of Performance Improvement Using GMSK Modulation Technique in Wireless DS-CDMA Communication Systems" published in International Journal of Engineering Science and Technology (IJEST) , ISSN No: 0975-5462, vol:4 ,No:4, May 2012 ,pp:1864-1868.

- Performance Evaluation of Rake and Pre-rake Receiver for Wireless DS-CDMA System" IJET **UK**, International Journal of Engineering and Technology, accepted for publication in Vol.6, June 2012.

- Performance Analysis of Modulation Techniques in MIMO Rician Channel for WCDMA System", published in International Journal of Engineering Research and Development e-ISSN: 2278-067X, p-ISSN: 2278-800X, Volume 4, Issue .7., PP. 17-20, October 2012 .

- Comparative Analysis of Daubechies Wavelets in OWDM with OFDM for DVB-T", published in International Journal of Scientific & Engineering Research (IJSER), vol:4, issue: 3, March 2013 with ISSN 2229-5518.

- Comparative Analysis of Coiflet Wavelets in OWDM with OFDM for DVB-T", published in International Journal of Engineering Research & Technology (IJERT) , vol:2, issue: 3, March 2013 with ISSN 2278-0181.

- Comparative Analysis of Different Wavelets in OWDM with OFDM for DVB-T", published in International Journal of Advancements in Research & Technology, Vol: 2,Issues 3, March-2013, ISSN No: 2278-7763.

- Effects of sectoring on capacity of CDMA multi-hop communication network", published in International Journal of Electronics and Computer science Engineering, pp: 1111-1116, Vol: 2, September 2013, ISSN No: 2277-1956.

- Analysis of Power Control Algorithm for DS-CDMA" published in Research Inventry: International Journal of Engineering and Science Vol.3, Issue 9 (September 2013), pp. 37-43 ISSN (e): 2278-4721, ISSN (p):2319-6483.

- Performance of Power Control Algorithm for DS-CDMA on Reverse Link" published in International Journal of Electronics Communication and Computer Engineering Volume 4, Issue 5, ISSN (Online): 2249–071X, ISSN (Print): 2278–4209.

- Efficient Carry Skip Adder Design using Full Adder and Carry Skip Block Based on Reversible Logic" Published in American Journal of Engineering And research , Vol: 4, issue 12, December 2015 with ISSN(e) 2320-0847.

- Design of ALU Based on Reversible Gates" published International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineeringin ISSN (Print) : 2320 – 3765 ISSN: 2278 – 8875, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering ,Vol. 5, Issue 12, December 2016.

- Reversible Adder-Substractor Circuit with Carry and Borrow propogate Facility". Published in 3rd IEEE International Conference on Advances in Computing, Communication And Automation(ICACCA-2017) ,organized by Tula's Institute, Dehradun from 15-16th September 2017.

- Implement of 4-bit Vedic Multiplier Using Fredkin and Feynman gates", published in IEEE International Conference on held from 1-3rd Febuary 2020 at MJP Rohilkhand University, Bareilly(UP).

- A comparative Study on Charcatirisctics and Properties on adaptive algorithms appiled to Noise cancellation Techniques",Published in IEEE International conference on computational and Charactirization Techniques in Engieerning & Sciences 2018. Also available on IEEE xplore digital library.

- Charcatirisctics and Properties of audio signal and noise cancellation techniques: A Theritical Review", IEEE International conference on computational and Charactirization Techniques in Engieerning & Sciences(CCTES) 2018. Also available on IEEE xplore

(j) Memberships of Academic/Professional Bodies:

Indian Society of Technical Education (I.S.T.E), New Delhi.

Institution of Electronics and Telecommunication Engineers (I.E.T.E), New Delhi.

(k) Participation in Community Service / Exchange Programme / Consulting Activity

Signed a MOU with DKOP Lab., a channel partner of IIT, Delhi in the field of VLSI Design to impart technical training to final year students in year 2011 for industrial exposure.

Member of Board of Studies (BOS) of Deptt. of EC Engg., Gurukul Kangari University, Haridwar (Uttrakhand), I.F.T.M University, Moradabad, T.M.U University, Moradabad.

(l) International Academic Exposure

Nil			

(m) Any Other Details

Got 03 Gold medals at graduate level for securing first position in Avadh University, Faizabad-UP. Has been National Merit scholarship holder from junior high school to PG level.

Signature of faculty member