

#### 1. Dr. Imteyaz Ahmad

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Research Gate RG Score- 62

Google Scholar citation: 113

- . Department: Electronics and Communication Engineering
- 3. Email id: iahmad.ece@bitsindri.ac.in
- 4. Phone Number: 9931298765
- 5. Office Address: Department of ECE, BIT Sindri, Dhanbad, 828123
- 6. Qualification: PhD

S. No	Degree(UG, PG, PhD)	Specialization	University	Year
1	PhD	Electronics and Communication Engineering	Vinoba Bhave University, Hazaribagh	2016
2	M.E	<b>Electronics Engineering</b>	Mumbai University	2005
3	B.E	Electronics Engineering	Nagpur University	1995

- 7. Specializations- Analog and digital signal processing, Biomedical Instrumentation
- 8. Number of PhD candidate registered: 03 under JUT
- 9. Subjects Taught:
- I) UG:- Basic Electronics, Digital Electronics, Communication system, Analog Electronics, Microprocessor, Computer organization and Architecture, Signal and System, Digital Signal Processing, Biomedical Electronics and Biomedical Instrumentation
  - II) PG:- Digital Signal Processing
  - 10. Professional Experience:
    - I) Teaching Experience:

Sl. No.	Position held	Name of Organization	from	to
1.	Associate Professor, ECE	ECE Department, BIT SINDRI	03.02.18	working
2.	Head of Department ECE	ECE Department, BIT SINDRI	01.11.2019	30.11.2021
3.	Assistant Professor (8000 AGP)	BIT SINDRI	07.09.16 Notification	02.02.18 09.01.18

	4.	Assistant Professor (7000 AGP)	BIT SINDRI	07.09.11	07.09.16
				notification	22.02.17
ĺ	5.	Assistant Professor (6000 AGP)	BIT SINDRI	07.09.06	07.09.11

## II) Research Experience: 03 candidate registered for Ph.D. under JUT

### 11. Publications:

### I)International Journal

Sl. No.	Title of the paper	Name of the journal in which publication has been made	Vol/No.	Publicatio n Year	Pages
1.	Prevention Of Noise- Induced Hearing Loss For Coal Mines, electronic diagnostic and its Management	International journal for electro computational world knowledge interface- ISSNNO(P).2249-541X ISSN NO(O).2249-5428	Vol-1 Issue-3	Nov 2011	26-31
2.	Occupational Lung diseases, A study of prevalence in coal mines of Jharkhand state, its electronic diagnostic and e-governance of Health care	International journal for electro computational world knowledge interface- ISSNNO(P).2249-541X ISSN NO(O).2249-5428	Vol-1 Issue-3	Nov 2011	36-43
3.	A Review of EMG Recording Technique	International journal of Engineering Science and Technology ISSN NO.0975-5462	Vol-4 Issue-2	Febuary- 2012	530-539
4.	Signal processing of ECG using Matlab ISSN 2250-3153	International Journal of Scientific and Research Publications	Volume 2 Issue 10	October 2012	1-6
5.	Design of a low cost ECG system	International Journal of Electronics Engineering ISSN: 0973- 7383 (IP-0.45)ISSNNO.0973- 7383	Vol-4 Issue-2	July-Dec. 2012	229-233

6.	A Review of EEG Recording Techniques	International Journal of Electronics and communication Engineering and Technology(IP- 3.5930)ISSN(O) 0976 – 6464(Print)ISSN 0976 – 6472(Online)	Vol-3 Issue-3	Oct. to Dec 2012	177-186
7.	Power line noise reduction in ECG by Butterworth notch filters: A comparative study	International Journal of Electronics, Communication& Instrumentation Engineering Research and Development ((IP- 2.98)ISSN 2249-684X	Vol3 Issue-3	Aug 2013	65-74
8.	A study of Power line interference cancellation using IIR, adaptive and wavelet filtering in ECG	International Journal of Electronics Signals and Systems ISSN: 2231-5969	Vol3 Issue-2	2013	53-55
9.	Cancellation of motion artifact noise and Power line interference in ECG using Adaptive filters	International Journal of Electronics Signals and Systems ISSN: 2231-5969	Vol3 Issue-2	2013	56-58
10.	Power line interference noise removal in ECG-A Comparative study	International Journal on Computer Science and Engineering (IJCSE) ISSN : 0975-3397	Vol7 Issue-2	Feb-2015	13-18
11.	IoT-Based Patient Health Monitoring System	2018 Springer Nature Singapore Pte Ltd.	Volume -471	Jan-2018	177-183
12.	A Review of QRS Detection Algorithms	International Journal of Innovative Research in Science, Engineering and Technology ISSN(Online) : 2319-8753 ISSN (Print): 2347-6710	Vol. 7, Issue 3	March 2018	2930- 2936

13.	Improving Performance of basic First Order Difference Operator as a Filter to Remove Base Line Wander Noise in ECG	International Journal of Innovative Research in Computer and Communication Engineering ISSN(Online): 2320-9801 ISSN (Print): 2320-9798	Vol. 6, Issue 4	April 2018	3893- 3898
14.	ECG Signal processing using Adaptive filters	International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering ISSN (Print): 2320 – 3765 ISSN (Online): 2278 – 8875	Volume 7, Issue 5	May 2018	2781- 2786
15.	A Review of ECG Signal Processing"	International Journal of Innovative Research in Science, Engineering and Technology ISSN(Online) : 2319-8753 ISSN (Print): 2347-6710	Volume 7, Issue 6	June 2018	7542- 7551
16.	Protection and monitoring of three phase induction motors	International research journal of Engineering and Technology	Volume 6, Issue 3	March 2019	4419- 4421
17.	Experiments in Matlab and Scilab: A Comparative Study	International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering ISSN (Print): 2320 – 3765 ISSN (Online): 2278 – 8875	Vol. 8, Issue 5	May 2019	2705- 2713
18.	A review of QRS detection by differentiation method	International Journal of Research in Engineering, IT and Social SciencesISSN-2250-0588 (Online)	Volume-10, Issue-06	June 2020	17-22
19.	QRS detection for heart rate monitoring	International Journal of Electrical Engineering and Technology (IJEET) ISSN Print: 0976-6545 and ISSN Online: 0976-6553 Scopus indexed	Vol11 Issue 4	June 2020	360-367
20.	A Time Domain Method for Calculation of Heart Rate Variability	International Journal of Computer Applications (0975 – 8887)	Vol176 Issue No 40	July 2020	14-17

21.	Self Consistent Quantum Mechanical Modeling of QCA	International Journal of Innovative Research in Science, Engineering and Technology ISSN(Online) : 2319-8753 ISSN (Print): 2347-6710	Vol. 9 Issue 9	Septembe r 2020	9072- 9078
22.	Base Line Wander, Breathing, Power Line Interference Noise Suppression and QRS Detection in Scilab	International Journal of Computer Applications (0975 – 8887)	Volume 175, Issue 29	Novembe r 2020	24-28
23.	Base Line Wander, Power Line Interference Noise Suppression and QRS Detection in ECG Signal using SCILAB	International Journal for Research in Applied Science & Engineering Technology	Volume 8, Issue 11	Novembe r 2020	359-363
24.	Smart Attendance Monitoring System with computer Vision Using IOT	Journal of Mobile Multimedia	Vol.17 Issue-3	January 2021	115-126
25.	Digital Control & Readout of MEMS Gyroscope using Second Order Sliding Mode Control	IEEE Sensors Journal,	ISSUE-21 VOL22 DOI 10.1109/JSEN.2022.3189475	2022	20567- 20574

## II) International Conference:

S1.	Title of the paper	Name of the Conference in which	Vol./No.	Publication	Pages
No.		publication has been made		Year	
1.	IoT based Patient Health Monitoring System	International Conference on Microelectronics Electro-magnetic and Telecommunication (ICMEET) ICMEET 2017 BVRIT Hyderabad	Vol471	Sept 2017	177-183
2.	Smart attendance monitoring system with Computer vision using IOT	International Symposium on 5G & Beyond for Rural Upliftment 8-9 feb.2020	e-ISBN: 9788770222174	2020	23234- 238

# III) National Journal:

Sl. No.	Title of the paper	Name of the journal in which publication has been made	Vol/No.	Publication Year	Pages
1.	Minetech. A publication of CMPDI,ISSN NO.0970-7204	A Review of occupational health hazards electronic diagnostic and e-governance of Health care of miners in coal mines	Vol-33 Issue-2	June-2012	30-40

### IV) National Conference :

Sl. No.	Name of the Conference in which publication has been made	Title of the paper	Pages	Publication Year
1.	National seminar at ISMU Dhanbad FECIT-2008	IP TV	204	Oct 2008
2.	National workshop on technological Challenges of 21st Century the Road Ahead at BIT sindri	Digital Signal Processing for Medical Equipments: A case study for ECG		February 8 <sup>th</sup> and 9 <sup>th</sup> 2008
3.	National Seminar on Environmental issue on Geotechnics & Mineral Industries, at B.I.T Sindri	Photo Voltaic Cell the demand of modern era.	284	April 2008
4.	National seminar at ISMU Dhanbad RAIT-2009	Mobile phone based ECG monitoring system	119	Feb-2009
5.	The Institution of Engineers(India) & B.I.T Sindri World Environment Day Seminar -2009	Sensor-based, Web Service- enabled, Emergency Medical Response System	77	June-2009
6	National seminar at B.I.T Sindri RTEFS-2009	EEG Signal Acquisition System	85	2 <sup>nd</sup> and 3 <sup>rd</sup> Nov 2009
7	National seminar organized by The Institution of Engineers(India) at CIMFR ,Dhanbad AMPS-2011	An Implementation of Real- time Monitoring and Analysis in Telemedicine	287	26 and 27 <sup>th</sup> Aug.2011
8	National seminar organized by The Institution of Engineers(India) at CIMFR ,Dhanbad AMPS-2011	Location Tracking System & Sensor Based Communications For Mining	377	26 and 27 <sup>th</sup> Aug.2011
9	National seminar at ISMU Dhanbad, FECIT-2011	A Real Time Monitoring and Tele-medical Data Acquisition System for Use in Preventive Medicine	83	3-4 Nov-2011
10	National seminar on Indian Nuclear power programme : Challenges and opportunities-INCO-12	Review of medical image reconstruction an aid in diagnostic of health hazards and its biological effects	58	April 14,15 2012
11	National seminar on Indian Nuclear power programme: Challenges and opportunities-INCO-12	Health hazards of coal combustion	89	April 14,15 2012
12	National seminar on Energy and Environment for Sustainability EES-	A DSP Approach to calculation of HRV	17	16-17 March

	2013			2013
13	National Seminar on environmental Issues on Environmental Issues: Protection, Conservation and Management (EIPCM)	Arrhythmia Detection Using Matlab. for Coal Miners	152	26-27 Feb.2016

# 12. Conference/Workshop/Seminar Organized

Sl. No.	Title of Seminar / Conferences / Short – term Courses	Name of Coordinator /Organizing secretary	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses	No. of Participants
1.	DSP and Sensors	Dr. C. Periasamy  Local Coordinator-Dr.  Imteyaz Ahmad	Electronic and ICT Academy ,Ministry of IT, Gov. of India	10-14 Dec. 2018	21
2.	WINTER FDP PROGRAM ON NATURAL LANGUAGE PROCESSINIG	Local Coordinator-Dr. Imteyaz Ahmad	do	06-10 Jan. 2020	25
3.	International Symposium on 5G & Beyond for Rural Upliftment	Dr. J Kumar Dr. Imteyaz Ahmad	IIT(ISM) Dhanbad, BIT Sindri	8-9feb.2020	200
4.	Multi-physics Simulation for teaching and research	Dr. Imteyaz Ahmad	BIT Sindri	22 Nov.2019	25
5.	Utility of Soft tools in Industry and g Director, BIT Sindri Patron Academia	Dr. Imteyaz Ahmad Dr. S.K Verma	BIT Sindri	27th – 31st January, 2021	70

# 13. Symposium/ Workshop/Seminar/ Attended

Sl. No.	Title of Symposium/ Workshop/Seminar/ Short – term Courses	Date	Organizing Institute
	National workshop on Technological Excellence Through Value Engineering	7 <sup>th</sup> April 2007	BIT Sindri
	National workshop on Industry Institute Interaction	13 <sup>th</sup> – 14 <sup>th</sup> July 2007	BIT Sindri
3.	Workshop on Parallel & Distributed computing	March 28th 2008	I S M U Dhanbad

	LAB VIEW	$7^{th} - 8^{th}$ March 2008	BIT Sindri
	Workshop on Rational Suite	23 <sup>rd</sup> – 24 <sup>th</sup> Aug. 2008	B I T Mesra
	National Seminar on Environmental issue on Geotechnics & Mineral Industries.	April 4-5, 2008	BIT Sindri
7.	National workshop on technological Challenges of 21st Century the Road Ahead.	February 8-9, 2008	BIT Sindri
8.	National Seminar on Environmental issue on Geo-techniques & Mineral Industries.	April 4-5, 2008	BIT Sindri
9	National Workshop on VLSI & Embedded System Based Design.	March 6-8, 2009	NIT Jamshedpur
10.	Recent Trends in Emerging Frontiers of Physical Science.	Nov. 2-3, 2009	BIT Sindri
11.	National Seminar on Energy and Environment for Sustainability	Mar. 16-17, 2013	BIT Sindri
12.	All India Seminar on RAMM	Feb. 07-08, 2014	BIT Sindri
13.	Science and Technology of Special Steels and Nano-materials	Feb.17-18, 2018	BIT Sindri
14.	Workshop on "Multiphysics Simulation for Teaching and Research"	Nov. 22, 2019	TEQIP,BIT Sindri

Serial no.	Name of Short term Course	Duration	Organized by
1.	Computer Fundamentals & Programming Languages	4th Aug. to 12th Sept.,1997	I.S.T.E. CHAPTER M.H. Saboo Siddik Institute of Engineering & Technology, Mumbai-8
2.	Digital Signal Processing	October	DTE,Maharashtra State
		13-17,1997	Government Polytechnic,Pune
3.	Induction phase-1	22th June to 17th	Government Polytechnic,
		July 1998	Mumbai,Bandra(E)
4.	16-bitMicroprocessor Architecture and	June 8th -12th 1998	DTE,Maharashtra State
	Programming		Government Polytechnic,Pune
5.	Managing the Departments	Aug 4th -8th 2003	TTTI Ext. Centre,Pune
6.	Certified PLC Programmer	April 7th – 12th 2008	Prolific System & Technological Pvt. LTD.
7.	STTP on DSP kit TMS320LF2407A &6713	31 March – 2nd April 2007	BIT,Mesra,Ranchi

9.         Computer Architecture and Design         29thOCT.— 11th NOV.2008         N.I.T.Rourkela           10.         LAB VIEW         March 7th- 8th 2008         Electrical Deptt.,B.I.T.Sindri           11.         Developing Personal & Professional Effectiveness         December 16-24,2006         XLRI,Jamshedpur           12.         Pedagogy-II         October 14-19,2008         TEQIP CELL B.I.T.,Sindri           13.         Soft skills for professional Effectiveness         5.12.11 to 16.12.11         NTTTTR,Bhopal           14.         ISTE sponsored STTP on performance enhancement skills         23.8.12 to 03.08.12         ISTE BIT Sindri           15         WORKSHOP ON OUTCOME BASED EDUCATION AND ACCR         16:3/18 to 17/3/8         BIT Sindri           16         SUMMER TRAINING PROGRAM ON ACTIVE LEARNING         18:6/18 to 22/6/18         IIT Gandhinagar           17         Advancement and application of soft computing in Electrical systems         BIT Sindri         BIT Sindri           18         WINTER PROGRAM ON DSP and sensor         10/12/18 to 14/12/18         BIT Sindri           19         WINTER PROGRAM ON AI AND MACHINE LEARNING         17/12/18 to 21/12/18         BIT Sindri           20         ROBOTICS AND AI         24/6/19 to 28/6/19         BIT Sindri           21         INTERNET OF THINGS         14/10/19 to 18/	8.	DSP tools & Practice	June 4th -9th 2007	G.S Sanyal School of Telecom.,I.I.T.,Kharagpur
11.   Developing Personal & Professional Effectiveness   December 16-24,2006   XLRI,Jamshedpur	9.	Computer Architecture and Design		N.I.T,Rourkela
12.	10.	LAB VIEW	March 7th- 8th 2008	Electrical Deptt.,B.I.T,Sindri
13.   Soft skills for professional Effectiveness   5.12.11 to 16.12.11   NITTTR,Bhopal     14.   ISTE sponsored STTP on performance enhancement skills   23.8.12 to 03.08.12   ISTE BIT Sindri     15.   WORKSHOP ON OUTCOME BASED   16/3/18 to 17/3/8   BIT Sindri     16.   SUMMER TRAINING PROGRAM ON ACTIVE   LEARNING   Advancement and application of soft computing in     17.   LEARNING   Advancement and application of soft computing in     18.   WINTER PROGRAM ON DSP and sensor   10/12/18 to 14/12/18   BIT Sindri     19.   WINTER PROGRAM ON AI AND MACHINE   17/12/18 to 21/12/18   BIT Sindri     19.   WINTER PROGRAM ON AI AND MACHINE   17/12/18 to 21/12/18   BIT Sindri     19.   WINTER PROGRAM ON NAI AND MACHINE   17/12/18 to 21/12/18   BIT Sindri     20.   ROBOTICS AND AI   24/6/19 to 28/6/19   BIT Sindri     21.   INTERNET OF THINGS   14/10/19 to     18/10/19   BIT Sindri     22.   WINTER FDP PROGRAM ON NATURAL   18/10/19   BIT Sindri     23.   WINTER FDP PROGRAM ON ICT TOOLS FOR   13/01/20 to 10/01/20   BIT Sindri     24.   INTERNATIONAL SYMPOSIUM ON FIVE G   8/2/20 to 9/2/2020   BIT Sindri	11.	Developing Personal & Professional Effectiveness	December 16-24,2006	XLRI,Jamshedpur
14.   ISTE sponsored STTP on performance enhancement skills   23.8.12 to 03.08.12   ISTE BIT Sindri	12.	Pedagogy-II	October 14-19,2008	TEQIP CELL B.I.T.,Sindri
enhancement skills	13.	Soft skills for professional Effectiveness	5.12.11 to 16.12.11	NITTTR,Bhopal
EDUCATION AND ACCR  SUMMER TRAINING PROGRAM ON ACTIVE LEARNING Advancement and application of soft computing in Electrical systems  WINTER PROGRAM ON DSP and sensor  WINTER PROGRAM ON AI AND MACHINE LEARNING  ROBOTICS AND AI  INTERNET OF THINGS  WINTER PROGRAM ON NATURAL LANGUAGE PROCESSINIG  WINTER FDP PROGRAM ON NATURAL LANGUAGE PROCESSINIG  WINTER FDP PROGRAM ON NATURAL LANGUAGE PROCESSINIG  WINTER FDP PROGRAM ON ICT TOOLS FOR T/L PROCESS AND INST.  INTERNATIONAL SYMPOSIUM ON FIVE G  8/2/20 to 9/2/2020  BIT Sindri  BIT Sindri  13/01/20 to 17/01/20  BIT Sindri  BIT Sindri  BIT Sindri  13/01/20 to 17/01/20  BIT Sindri	14.		23.8.12 to 03.08.12	
LEARNING Advancement and application of soft computing in Electrical systems  13/7/18 to 17/7/18  BIT Sindri  WINTER PROGRAM ON DSP and sensor  10/12/18 to 14/12/18  BIT Sindri  WINTER PROGRAM ON AI AND MACHINE LEARNING  ROBOTICS AND AI  24/6/19 to 28/6/19  BIT Sindri  21 INTERNET OF THINGS  14/10/19 to 18/10/19  WINTER FDP PROGRAM ON NATURAL LANGUAGE PROCESSINIG  WINTER FDP PROGRAM ON ICT TOOLS FOR T/L PROCESS AND INST.  13/01/20 to 17/01/20  BIT Sindri  13/01/20 to 17/01/20  BIT Sindri  13/01/20 to 17/01/20  BIT Sindri  24 INTERNATIONAL SYMPOSIUM ON FIVE G  8/2/20 to 9/2/2020  BIT Sindri	15		16/3/18 to 17/3/8	BIT Sindri
19 WINTER PROGRAM ON AI AND MACHINE LEARNING 20 ROBOTICS AND AI 21 INTERNET OF THINGS 21 WINTER FDP PROGRAM ON NATURAL LANGUAGE PROCESSINIG 22 WINTER FDP PROGRAM ON ICT TOOLS FOR T/L PROCESS AND INST. 23 WINTER FDP PROGRAM ON ICT TOOLS FOR T/L PROCESS AND INST. 24 INTERNATIONAL SYMPOSIUM ON FIVE G 25 8/2/20 to 9/2/2020 BIT Sindri		LEARNING  Advancement and application of soft computing in		-
LEARNING  20 ROBOTICS AND AI  24/6/19 to 28/6/19  BIT Sindri  21 INTERNET OF THINGS  14/10/19 to 18/10/19  22 WINTER FDP PROGRAM ON NATURAL LANGUAGE PROCESSINIG  23 WINTER FDP PROGRAM ON ICT TOOLS FOR T/L PROCESS AND INST.  13/01/20 to 17/01/20  BIT Sindri  13/01/20 to 17/01/20  BIT Sindri  24 INTERNATIONAL SYMPOSIUM ON FIVE G  8/2/20 to 9/2/2020  BIT Sindri	18	WINTER PROGRAM ON DSP and sensor	10/12/18 to 14/12/18	BIT Sindri
21 INTERNET OF THINGS 14/10/19 to 18/10/19  22 WINTER FDP PROGRAM ON NATURAL LANGUAGE PROCESSINIG  23 WINTER FDP PROGRAM ON ICT TOOLS FOR T/L PROCESS AND INST.  13/01/20 to 17/01/20  BIT Sindri  13/01/20 to 17/01/20  BIT Sindri  24 INTERNATIONAL SYMPOSIUM ON FIVE G 8/2/20 to 9/2/2020  BIT Sindri	19		17/12/18 to 21/12/18	BIT Sindri
22 WINTER FDP PROGRAM ON NATURAL LANGUAGE PROCESSINIG  23 WINTER FDP PROGRAM ON ICT TOOLS FOR T/L PROCESS AND INST.  24 INTERNATIONAL SYMPOSIUM ON FIVE G  28/2/20 to 9/2/2020  BIT Sindri  8/2/20 to 9/2/2020  BIT Sindri	20	ROBOTICS AND AI	24/6/19 to 28/6/19	BIT Sindri
LANGUAGE PROCESSINIG  23 WINTER FDP PROGRAM ON ICT TOOLS FOR T/L PROCESS AND INST.  24 INTERNATIONAL SYMPOSIUM ON FIVE G 8/2/20 to 9/2/2020 BIT Sindri	21	INTERNET OF THINGS		BIT Sindri
T/ L PROCESS AND INST.  24 INTERNATIONAL SYMPOSIUM ON FIVE G 8/2/20 to 9/2/2020 BIT Sindri	22		06/01/20 to 10/01/20	BIT Sindri
	23		13/01/20 to 17/01/20	BIT Sindri
Digital transformation in teaching learning process 6/4/20 to 22/4/2020 BIT Sindri	24	INTERNATIONAL SYMPOSIUM ON FIVE G	8/2/20 to 9/2/2020	BIT Sindri
	25	Digital transformation in teaching learning process	6/4/20 to 22/4/2020	BIT Sindri

26	Free Open source tools for Education and Research	07/07/20	BIT Sindri
27	Transforming pedagogy in India	01.8.20 to 3.8.20	NIT Jamshedpur
28	Design and Analysis of Microwave Systems using ANSYS HFSS	Nov.02-06 2020(1 Week)	BIT Sindri

#### 14. Administrative Position Held:

S. No.	Position Held	From (date/month/year)
	Co-ordinator of Dept. of ECE, CSE and IT, BIT Sindri.	Jan. 2007 to 02.08.11
	Head Department of ECE, BIT Sindri	01.11.2019 to 30.11.2021
	GATE Co-ordinator, BIT Sindri	Feb. 2017 to Nov. 2021
	Hostel Superintendent, Hostel No. 19, BIT Sindri	01.04.17 to 31.10.19
	Professor In charge IETE Club	2012 to Working

### 15. Members of Professional Bodies:

1)AMIE (AM-097625-6)

2) ISTE (LM-29284).

- 16. Completed two online course from NPTEL/SWAYAM Jan-March/April 2022
- 1) Discrete time signal processing (Certificate received)
- 2) Biomedical signal processing (Certificate received)

Completed two online course from NPTEL/SWAYAM July to October 2022

- 3) Real time DSP(Certificate received)
- 4) Digital circuits(Certificate received)

Completed two online course from NPTEL/SWAYAM Jan-March/April 2023

- 5)Op-amp practical applications: Design, Simulation and implementations (Certificate received)
- 6) Digital signal processing (Certificate received)

Dr. Imteyaz Ahmad