


## Bio-Data of Dr. Dhiraj Sunehra

Jawaharlal Nehru Technological University Hyderabad, India

### A. General Information

1.	Name	Dr. Dhiraj Sunehra	
2.	Date of Birth	14 <sup>th</sup> January 1973	
3.	Place of Birth	Hyderabad	
4.	Gender, Marital status and Nationality	Male, Married, Indian	
5.	Present Designation & Place of Work	Professor & Head, Department of Electronics & Communication Engineering, JNTUH College of Engineering, Jagtial. Working since 15 <sup>th</sup> July 2010.	
6.	Permanent Residential Address, Phone and Email	Flat No. 104, 3-6-594 Sharada Gopalan Apartments Himayatnagar, St.No. 8 Hyderabad – 500 029, T.S. Tel: +91 7893278314, +91 9440268314 (Cell) E-mail: dhirajsunehra@yahoo.co.in	

### B. Academic Qualifications

S. No	Degree	Institution	Branch / Specialisation	Division / Percentage	Year of Passing
1.	Ph.D.	Osmania University, Hyderabad	Electronics & Communication Engineering	-	2012
2.	M.Tech.	Jawaharlal Nehru Technological University, Hyderabad.	Digital Systems & Computer Electronics	First 69.31%	2001
3.	B.E.	Chaitanya Bharathi Institute of Technology,	Electronics & Communication Engineering	First 68.94%	1997

		Hyderabad.			
4.	D.E.C.E. (Polytechnic)	Q.Q. Govt. Polytechnic, Hyderabad.	Electronics & Communication Engineering	First (Distinction) 78.8%	1992
5.	S.S.C.	All Saint's High School, Hyderabad.	-	First 70.6%	1988

### C. Professional Experience

S. No.	Designation	Name of the Employer	Date		Salary with Grade
			From	To	
1.	Professor	Jawaharlal Nehru Technological University Hyderabad	15 <sup>th</sup> Jul. 2016	Till-Date	Pay Scale: Rs.144200-218200
2.	Associate Professor	Jawaharlal Nehru Technological University Hyderabad	15 <sup>th</sup> Jul. 2010	15 <sup>th</sup> Jul. 2016	Pay Scale: Rs.37400-67000 + Rs.9000 AGP
3.	Associate Professor	J.B. Institute of Engineering & Technology, Moinabad, Hyderabad	1 <sup>st</sup> Jul. 2009	13 <sup>th</sup> Jul. 2010	Gross Pay: Rs.28,000/-
4.	Research Scientist	Research & Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad	21 <sup>st</sup> Jul. 2005	31 <sup>st</sup> Mar. 2008	Pay Scale: Rs.12000-375-16500  Last Pay: Rs.30,075/-
5.	Assistant Professor	Mahatma Gandhi Institute of Technology, Gandipet, Hyderabad	11 <sup>th</sup> Jan. 1999	20 <sup>th</sup> Jul. 2005	Pay Scale: Rs.8000-275-13500  Last Pay: Rs.21,260/-
6.	Assistant Professor	Chaitanya Bharathi Institute of Technology, Gandipet, Hyderabad	26 Aug. 1997	17 Jan. 1998	Gross Pay: Rs.2,800/-
<b>Total Experience</b>			22 Years		

## D. Fields of Specialization under the Subject / Discipline

1.	Embedded Systems and Internet of Things
2.	Green Wireless Communications
3.	Global Navigation Satellite Systems

## E. Prominent Academic Assignments and Distinctions

1.	11 <sup>th</sup> Rank in Dr. A.S. Rao National Science Talent Search Examination (1996-97).
2.	4 <sup>th</sup> Rank in M.Tech. Entrance Examination conducted by JNTU, Hyd. in 1997.
3.	<b>Senior Member of IEEE</b> , USA since June 2013. Chosen as <b>IEEE Young Professional</b> in 2014.
4.	Contributed as <b>Observer</b> in the Three-week SERC School on “GPS Applications and Atmospheric Constraints”, sponsored by Science and Engineering Research Board (SERB), <b>Department of Science and Technology, Government of India</b> , organized at the Research and Training Unit for Navigational Electronics, Osmania University, Hyderabad (13Jun - 03Jul, 2012).
5.	Nominated as <b>Expert member</b> to conduct visit of BSNL centre at Hyderabad, which is running EETP for the students of AICTE approved Engineering colleges under <b>AICTE-BSNL – Employability Enhancement Training Programme (EETP) Scheme</b> , 21 <sup>st</sup> April, 2014.
6.	<b>Doctoral Review Committee Member</b> for Ph.D. Research Review Meetings (RRMs) during July 2014 - July 2021 held at ECE Dept. of JNTUHCEH.
7.	<b>University Nominee</b> in the Selection committee for ratification/selection of ECE faculty in JNTUH affiliated engineering colleges.
8.	<b>Member and Convener</b> in Fact Finding Committees (FFC) appointed by JNTUH during academic year 2010-11 to 2021-22.
9.	<b>Special Observer</b> in TS-EAMCET 2017 and TS-EAMCET 2019, <b>Enforcement Officer</b> in TS-EAMCET 2015, EAMCET-2014 and EAMCET-2012. <b>Confidential Team Member</b> for Results processing of PRREDRT-2018, TREIRBT-2018, TS EAMCET-2016 and TS ECET-2015.
10.	<b>Member of Board of Studies</b> of ECE at Chaitanya Bharathi Institute of Technology (CBIT), Hyd. (2014-Till Date), of ECM at J.B. Institute of Engineering and Technology, Hyd. (2014-16), of ECE at Sreenidhi Institute of Science and Technology (SNIST), Hyd. (2017-19), Jayamukhi Institute of Technological Sciences (JITS), Warangal (2018-21), Gokaraju Rangaraju Institute of Engineering and Technology (GRIET), Hyd. (2019-22), TKR College of Engineering and Technology (2019-22), CMR Technical Campus, Hyd. (2019-22) and MLR Institute of Technology, Hyd. (2021-24).
11.	<b>Member of Technical Program Committee</b> in various national and international conferences: NAVCOM-2012, IEEE Indicon 2014, NCRTST-2015, ICACCI-2015, ICACCI-2016, CEIS-2016, IACC-2017, ICACCI 2017, EECSI 2020, CITEI 2020.

12.	<b>Reviewer</b> for Positioning International Journal, Indian Journal of Radio and Space Physics, and various IEEE International Conferences. <b>Chaired Technical Sessions</b> in NAVCOM-2012, NCAWC-2015, ICACCI-2015, IEEE PrimeAsia 2015, IACC-2016, SCOPES 2016, IACC-2017, ICCTCEEC-2017, ICPCSI-2017 and I2CT 2021.
13.	<b>Visited</b> New Delhi, Kolkata, Chennai, Coimbatore, Kochi, Pune, Mysore, Nagpur, Noida, Odisha, Bhimavaram and Visakhapatnam to participate and present research papers in various National and International Conferences, and Short-Term Training Programmes.
14.	<b>Life Member</b> of Professional Societies: The Institution of Electronics and Telecommunication Engineers (IETE), Association for Computing Machinery (ACM), Indian Society for Technical Education (ISTE) and Indian Geophysical Union (IGU).

## F. Academic Achievements

1.	Conferences/ Symposia/ Short Courses organized	<p>Eleven (11)</p> <ol style="list-style-type: none"> <li><u>Course Coordinator</u> of “<b>Training cum Demonstration of IoT Development Board (using Arduino and Raspberry Pi)</b>”, 7<sup>th</sup> October 2021 (FN), JNTUH CEJ, Jagtial. (Training is organised for postgraduate students and Faculty of ECE Department).</li> <li><u>Course Coordinator</u> of “<b>Hands-on Training cum Demonstration of Optical Communication Lab Experimental Kits</b>”, 7<sup>th</sup> October 2021 (AN), JNTUH CEJ, Jagtial. (Training is organised for Faculty of ECE Department).</li> <li><u>Course Coordinator</u> of “<b>An Online Two-Day Training Programme on Cadence VLSI Tools</b>”, October 4-5, 2021, JNTUH CEJ, Jagtial. (Training is organised for postgraduate students and Faculty of ECE Department).</li> <li><u>Convener</u> of “<b>A National Level Technical Symposium (Emblazon’19)</b>”, April 2-3, 2019, JNTUH CEJ, Jagtial. (<u>Tasks carried out:</u> Brochure designing, printing and dispatching, address and email list compilation, complete correspondence with participants and heads of various colleges, speakers, planning and organisation, inviting guests, and sponsorship, etc.)</li> <li><u>Convener</u> of “<b>A National Level Technical Symposium (Emblazon’18)</b>”, March 21-22, 2018, JNTUH CEJ, Jagtial. (<u>Tasks carried out:</u> Brochure designing, printing and dispatching, address and email list compilation, complete correspondence with participants and heads of various colleges, speakers, planning and organisation, inviting guests, and sponsorship, etc.)</li> </ol>
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	<p>6. <b>Convener</b> of “<b>A National Level Student Technical Symposium (Emblazon’17)</b>”, April 3-4, 2017, JNTUH CEJ, Jagtial. (<u>Tasks carried out</u>: Brochure designing, printing and dispatching, address and email list compilation, complete correspondence with participants and heads of various colleges, speakers, planning and organisation, inviting guests, and sponsorship, etc.)</p> <p>7. <b>Course Coordinator</b> of “<b>One-Day Workshop on Digital Image Processing and its Applications</b>”, 20<sup>th</sup> January 2017, JNTUH CEJ, Jagtial. (Course is organised for undergraduate students of Engineering).</p> <p>8. <b>Course Coordinator</b> of “<b>A Three-Day Intensive Course on Electromagnetic Theory and Transmission Lines</b>”, March 2-4, 2015, JNTUH CEJ, Jagtial. (Course is organised for faculty and students of Engg. colleges. Senior and eminent faculty / scientists from JNTUH, DRDO, Osmania University, CBIT and Vasavi Engg. College, Hyderabad are invited as resource persons).</p> <p>9. <b>Course Coordinator</b> of “<b>A Three-Day Intensive Course on Electromagnetic Theory Transmission Lines and Waveguides</b>”, March 1-3, 2012, JNTUH CEJ, Jagtial. (Course is organised for faculty of Engg. Colleges. Senior and eminent faculty / scientists from JNTUH, DRDO, Osmania University and CVRCE are invited as resource persons).</p> <p>10. <b>Convener</b> of “<b>A National Level Student Technical Symposium Emblazon’10</b>”, December 22-23, 2010, JNTUH CEJ, Jagtial. (<u>Tasks carried out</u>: Brochure designing, printing and dispatching, address and email list compilation, complete correspondence with participants and speakers, planning and organisation, inviting guests, publication of proceedings, sponsorships, etc.)</p> <p>11. <b>Convener</b> of “<b>Silver Jubilee National Conference on Global Navigation Satellite System and its Applications</b>”, October 25-26, 2007, Research &amp; Training Unit for Navigational Electronics, Osmania University, Hyderabad (Funded by Department of Science &amp; Technology and Department of Information Technology, New Delhi).</p>
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2.	No. of Research Publications	69 (International and National Journals : 33 Conferences and Symposia : 36) <b>Separate List enclosed (Pages 12-25).</b>	
3.	No. of Invited Lectures and Chairmanship	Invited Lectures : 31 Chairmanship : 13 (International Conference) 01 (National Conference) <b>Separate List enclosed (Pages 25-30).</b>	
4.	No. of Refresher Courses/ Summer schools attended	Participated in Twenty (23) weeks of AICTE/ ISTE/ DST/ DeitY sponsored Short Term Training Programmes. <b>Separate List enclosed (Pages 30-31).</b>	
5.	No. of M.Tech. Projects / Ph.D. guided	Ph.D. (Under guidance)	07
		M.Tech Projects guided	30*
		M.Tech (Under guidance)	02
6.	No. of Short courses / Workshops / Seminars attended	1. Participation in Seminars: 17 2. Participation in Short courses (< one week duration): 20 <b>Separate List enclosed (Pages 32-33).</b>	

### G. Contribution to Management of Institution at JNTUHCEJ

Designation	Department	Date	
		From	To
Head	Electronics & Communication Engineering	13th Sep. 2010 26th Dec. 2016	27 <sup>th</sup> Sep. 2012 Till-Date
	<p>Contributed to Campus development (Planning of various classrooms, staffrooms, and laboratories of ECE Dept. in the Academic Block-II).</p> <p>1. <u>Lab establishment:</u> Contributed for enquiry, processing, procurement of equipment and Lab establishment related to Microwave and Optical Communications Lab, Analog and Digital Communications Lab, Electronic Device and Circuits Lab, Electronic Circuit Analysis Lab, Microprocessors &amp; Microcontrollers Lab, Digital Signal Processing Lab, Digital IC Applications Lab, VLSI Design and Embedded Systems Lab at JNTUHCEJ.</p> <p>2. <u>Academic responsibilities as HoD:</u> Consolidation of Internal Exam marks and Monthly attendance, Faculty workload and time-table preparation, Monitor class / lab</p>		

	<p>work, Project work, Conduct of student seminars, Recommendation of Library books / journals/ magazines. Preparation and compilation of ECE Dept. data needed for Criteria 1, 4, and 6 for NBA. Preparation and compilation of College information needed for Criteria 4 of NAAC accreditation process.</p> <p>3. <u>Compiled Lab manuals:</u> Electronic Circuit Analysis Lab, Microprocessors &amp; Microcontrollers Lab, Embedded Systems Design Lab and Scripting Language Lab.</p> <p>4. <u>Prepared Guidelines / Format</u> for writing B.Tech./M.Tech. Project Report.</p> <p>5. Contributed for processing and procurement of various equipment in the ECE Dept. including two 10KVA UPS, 12 Split air conditioners for Computer labs, 45 Desktop computers with i3 CPU, 35 Desktop Computers with i5 CPU, Cadence Software and Multisim Software.</p> <p>6. The design of ECE Lab tables is proposed by me. The table is designed with electrical sockets mounted, space for keeping equipment and storage facility. Procurement and Fixing of window curtains and lab name boards.</p>		
Coordinator	Industry Institute Partnership Cell	29 <sup>th</sup> Oct. 2012	Till-date
	<p>1. Compiled College Information Brochure (2012-13) for improving Placements at JNTUHCEJ.</p> <p>2. Visited companies to correspond with HR Managers and invite for Campus placements. Gathered HR contacts of various companies and developed good relationship with Placement officers of other Engineering colleges (2012-13).</p> <p>3. Coordinated placement activity of M/s. VEDA IIT, Hyderabad for B.Tech. IV Year students during 2011 and 2012 and M/s. Pega Systems during 2013.</p> <p>4. Explore the possibilities of interaction with industry for student projects and industrial visits. Invite experts from industry / research labs for guest lectures.</p>		

## H. Prominent Assignments at JNTUHCEJ

S. No	Name of Committee / Programme	Responsibilities	Dates
1.	<u>Convener</u> , Discipline Committee for College Annual Day ( <b>Sizzles'17 and Sizzles'18</b> ).	<u>Tasks carried out:</u> To coordinate with allotted faculty and	April 25, 2017 and March 28, 2018

		student volunteers and ensure proper discipline during the conduct of the programme.	
2.	<u>Coordinator (ECE)</u> during First Year B.Tech Orientation programme – 2020-21, 2019-20, 2018-19, 2017-18, 2012-13, 2011-12, 2010-11	Coordinated the First year student admission process for ECE branch.	3 <sup>rd</sup> Dec. 2020, 5 <sup>th</sup> Aug. 2019, August 2018, August 2017, 24 <sup>th</sup> Sep. 2012, 24 <sup>th</sup> Aug. 2011 &4 <sup>th</sup> Oct. 2010
3.	<u>Member</u> of College Academic Committee during 2010-2012 and 2016-Till Date.	To discuss various academic matters related to the college.	Academic Years 2021-22 2020-21 2019-20 2018-19, 2017-18, 2016-17, 2011-12, and 2010-11
4.	<u>Convener</u> , Cultural Committee for College Annual Day ( <b>Sizzles'14</b> ) and Freshers Day celebrations.	<u>Tasks carried out:</u> Planning of the Cultural Programme and guiding students in the organization of the events, identifying student anchors and volunteers. Conducting various cultural and literary events.	April 3, 2014 and March 4, 2014
5.	<u>Convener</u> , Program Committee for College Annual Day celebrations ( <b>Sizzles'13</b> ).	<u>Tasks carried out:</u> Planning and formulation of the Programme, identifying student anchors and volunteers, stage, lighting and DJ arrangements,	April 4, 2013



			certificates and over all conduct of the programme.	
6.	Faculty Coordinator	IETE Students Forum (ISF) (Initiated by me during 2012-13).	13 <sup>th</sup> Sep. 2012	Till-date
		Encourage students to take membership of professional societies including IETE, New Delhi, and IEEE, USA. Guide them to organize and participate in various technical events including conferences, short courses and workshops. Students have access to journals sent by IETE periodically. The ISF at JNTUHCEJ has a total strength of 140 student members (2019-20).		
7.	<u>Faculty Coordinator</u> for Technical Quiz Competition – “Electronics quiz 2K19” organized under IETE Students Forum banner at JNTUH CEJ.		Overall conduct of the Programme	November 5, 2019
8.	<u>Faculty Coordinator</u> for “Technical Presentation Competition – TRADITIO 2K19” organized under IETE Students Forum banner at JNTUH CEJ.		Overall conduct of the Programme	March 8, 2019
9.	<u>Faculty Coordinator</u> for “Technical Presentation Competition – TRADITIO 2K16” organized under IETE Students Forum banner at JNTUH CEJ.		Overall conduct of the Programme	March 10, 2016
10.	<u>Member</u> of the Committee for Out-Sourcing Staff certificate verification at JNTUH CEJ		Verification of certificates of Out-Sourcing Staff.	Apr-May 2016
10.	<u>Member</u> of Advisory Committee during College Annual Day celebrations ( <b>Sizzles’12</b> ) and during Fresher’s Day (2011 & 2012).		Overall Supervision of the Programme	13 <sup>th</sup> Apr. 2012 & 16 Mar. 2012
11.	<u>Member</u> of College Disciplinary Action Committee		To discuss and settle ragging issues, if any and ensure proper discipline in the college campus.	Academic Years 2010-11, 2011-12, 2016-17, 2017-18, 2018-19, 2019-20 and 2020-21.

12.	<u>Member</u> of College Canteen Committee	To discuss various matters related to the college canteen	Academic Year 2011-12, 2016-Till Date.
13.	<u>Member</u> in various committees during First Year Orientation programme, Freshers Day programme and other programmes.	To contribute in the conduct of Orientation programme, Fresher's Day and other programmes at JNTUH CEJ.	Academic Years 2013-14 to 2015-16

### **I. Contribution to Examination Duties Assigned by JNTUH and other Institutions**

S.No	Type of Examination Duties	Duties Performed
1.	Confidential Work in PRREDRT 2018	Contributed for Results Processing.
2.	Confidential Work in TREIRBT 2018	Contributed for Results Processing.
3.	Confidential Work in TS-EAMCET 2016	Contributed for Results Processing.
4.	Confidential Work in TS-ECET FDH 2015	Contributed for Results Processing and Finalization of Scheme of Valuation (Key).
5.	Special Observer in TS-EAMCET 2019, TS-EAMCET 2017, Enforcement Officer in EAMCET-2012, EAMCET-2014 and TSEAMCET-2015 and Observer in EAMCET-2011 and TS-EAMCET 2018.	Monitor and ensure smooth conduct of the entrance exam at the allotted test centres.
6.	Special Observer / Sitting Squad for University End Semester examinations at private Engineering Colleges.	Monitor and ensure smooth conduct of the University End Semester examination.
7.	Question paper setting in the academic years 2010-11 to 2021-22	Preparation of B.Tech / M.Tech. University End Semester / Pre-Ph.D. Examination Question papers for JNTUH, Osmania University, JNTUHCEH, JNTUA, JNTUK, S.V. University, Vignan Univ., University of Kerala and other autonomous private engg. colleges including CBIT, Vasavi Engg. College, JBIET, GNITS,

		Sree Indu College of Engg., Hyderabad, and SR Engg. College, Warangal.
8.	Examiner for Project Viva-voce examination	Examiner for B.Tech. and M.Tech. Project Viva-voce examination at JNTUHCEH and in several private engineering colleges affiliated to JNTUH, and M.Tech. Viva-voce examination at Osmania University, Vasavi College of Engineering, VEDA IIT, Hyd.
9.	Question bank preparation	Preparation of Computer based testing multiple choice question banks in Switching Theory and Logic Design for B.Tech II Year; Question bank in the subject of IC Applications, Microprocessors and Interfacing Devices for B.Tech III Year, JNTUH.
10.	University Semester Exam paper evaluation at JNTUH Exam branch Spot Centre	B.Tech. / M.Tech. / Pre-Ph.D. University Exam paper evaluation at JNTUH.
11.	Moderation work at JNTUH Exam branch	Carry out Moderation of question papers at JNTU Hyderabad as allotted from time to time.
12.	Detailed Scheme of Valuation	Preparation of Detailed scheme of valuation.
13.	M.Tech. Project Coordinator (2018-19 and 2014-15) and B.Tech. Project Coordinator (2017-18 and 2010-11) at JNTUH CEJ.	Coordinate the conduct of Project Reviews, provide guidelines to the student on the conduct of the project, monitoring the progress.
14.	Invigilation work of University End Semester/Mid examinations and Conduct of Lab examinations at JNTUH CEJ.	Invigilation work and conduct of lab examinations.
15.	B.Tech. and M.Tech. Semester Time-Table preparation from time to time, and conduct of Technical Seminars and Comprehensive Viva for B.Tech. and M.Tech. courses at JNTUH CEJ.	Coordinate the conduct of Seminars given by students, provide guidelines to students on documentation of the seminar report.

## J. Details of Research Publications and Academic Contributions

### 1. Journals Publications

S. No	Title of the Paper with page nos.	Journal	ISSN / ISBN No.	Whether peer reviewed	No. of Co-authors	Whether you are the First author
1.	Patient Health Monitoring System Using Arduino Mega 2560 And Thingsboard Server, Vol. 9, Issue 3, March 2020, pp. 5020-5026.	International Journal of Scientific and Technology Research	ISSN (e): 2277-8616	Yes	01	Yes
2.	Webpage And Telegram Bot Controlled Home Automation System Using Raspberry Pi3, Vol. 9, Issue 2, February 2020, pp. 3591-3595.	International Journal of Scientific and Technology Research	ISSN (e): 2277-8616	Yes	01	Yes
3.	Home Environment Monitoring and Lighting Control using Cloud MQTT Dashboard, Vol. 9, Issue 2, February 2020, pp. 3539-3545.	International Journal of Scientific and Technology Research	ISSN (e): 2277-8616	Yes	01	Yes
4.	Energy-efficient multihop routing in WSN using the hybrid optimization algorithm, 25 May 2020, <a href="https://doi.org/10.1002/dac.4440">https://doi.org/10.1002/dac.4440</a>	International Journal of Communication Systems	ISSN (e): 1099-1131	Yes	02	No
5.	Web Controlled Door Lock System with Email Alert	IOSR Journal of Engineering	ISSN (e): 2250-3021,	Yes	NIL	Yes

	using Raspberry Pi, Vol. 9, Issue 3, March. 2019, pp. 29-38.		ISSN (p): 2278-8719			
6.	Design and Implementation of Web Based Smart Home Control System using Raspberry Pi, Vol. 9, Issue 3, March. 2019, pp. 18-28.	IOSR Journal of Engineering	ISSN (e): 2250-3021, ISSN (p): 2278-8719	Yes	NIL	Yes
7.	Biometric Based Attendance Registration and Consolidation System using Raspberry Pi3 and Amazon Web Server, Vol.10, Issue 2, Mar.-Apr. 2019, pp. 34-43.	International Journal of Advanced Research in Engineering and Technology	ISSN Print: 0976-6480 and ISSN Online: 0976-6499	Yes	NIL	Yes
8.	Raspberry Pi Based Pollution and Climate Monitoring System using Internet of Things, Vol.10, Issue 2, Mar.-Apr. 2019, pp. 44-54.	International Journal of Advanced Research in Engineering and Technology	ISSN Print: 0976-6480 and ISSN Online: 0976-6499	Yes	NIL	Yes
9.	Implementation of a Smart Fire Management and Gas Leakage Control System with User Alert using Raspberry Pi3, Vol.6, Issue 1, Mar. 2019, pp. 202-210.	International Journal of Research and Analytical Reviews	E-ISSN 2348-1269, P- ISSN 2349-5138	Yes	NIL	Yes
10.	Development of a Smart Home Communication and Device Control System using	International Journal of Research and Analytical Reviews	E-ISSN 2348-1269, P- ISSN 2349-	Yes	NIL	Yes

	Raspberry Pi3 and NodeMcu, Vol.6, Issue 1, Mar. 2019, pp. 1314-1323.		5138			
11.	Web Based Smart Irrigation System using Raspberry Pi, Vol.10, Issue 2, Mar.-Apr. 2019, pp. 55-64.	International Journal of Advanced Research in Engineering and Technology	ISSN Print: 0976-6480 and ISSN Online: 0976-6499	Yes	NIL	Yes
12.	Implementation of a Arduino Based RF Controlled Robot Vehicle System with Road Safety Alert Features, Vol.6, Issue 1, Mar. 2019, pp.280-287.	International Journal of Research and Analytical Reviews	E-ISSN 2348-1269, P- ISSN 2349-5138	Yes	NIL	Yes
13.	Bluetooth Based Office Automation and Security System using Raspberry Pi and Android Application Vol. 10, Issue 2, Mar.-Apr. 2019, pp. 449-456	International Journal of Advanced Research in Engineering and Technology (IJARET)	ISSN Print: 0976-6480 and ISSN Online: 0976-6499	Yes	NIL	Yes
14.	Smart Phone Based Energy Management System using Raspberry Pi3 Vol. 10, Issue 2, Mar.-Apr. 2019, pp. 463-471	International Journal of Advanced Research in Engineering and Technology (IJARET)	ISSN Print: 0976-6480 and ISSN Online: 0976-6499	Yes	NIL	Yes
15.	Solar Energy Driven Mosquito Repeller System using Arduino Uno Vol. 10, Issue 2,	International Journal of Advanced Research in Engineering	ISSN Print: 0976-6480 and ISSN	Yes	NIL	Yes

	Mar.-Apr. 2019, pp. 472-481	and Technology (IJARET)	Online: 0976- 6499			
16.	Implementation of Home Automation and Security System using Touch Screen, Remote Control and Web Based Operation, Vol. 9, Issue 1, Sept. 2017, pp. 105-112.	International Journal of Latest Trends in Engineering and Technology	e-ISSN: 2278- 621X p-ISSN: 2319- 3778	Yes	NIL	Yes
17.	Real Time Vehicle Tracking on Google Maps using Raspberry Pi Web Server, Vol. 4, Issue 6, Jun. 2016, pp. 325-330.	International Journal on Recent and Innovation Trends in Computing and Communicati on	ISSN: 2321- 8169	Yes	NIL	Yes
18.	Power Efficient Automated Lighting System using Wireless Sensor Network Approach, Vol. 7, Issue 6, Jun. 2016, pp. 896-901.	International Journal of Scientific & Engineering Research	ISSN 2229- 5518	Yes	NIL	Yes
19.	Energy Management in Clustered Heterogeneous Wireless Sensor Networks- A Study Concept, Special Issue, Jan. 2016, pp.42-45.	International Journal of Modern Engineering Research	ISSN No: 2249- 6645	Yes	02	No
20.	TEC and Instrumental Bias Estimation of GAGAN Station Using Kalman Filter and SCORE	Positioning (Published by Scientific Research Publishing, Inc.)	ISSN Online: 2150- 8526 ISSN Print:	Yes	NIL	Yes

	Algorithm, Vol. 7, Issue 1, Feb 2016, pp. 41-50.		2150-850X			
21.	Physiological Signals and Vehicle Parameters Monitoring System for Emergency Patient Transportation, Vol. 4, Special Issue 7, ICNBMS-2015, June 2015, pp. 30-35.	International Journal of Research in Engineering and Technology	e-ISSN: 2319-1163   p-ISSN: 2321-7308	Yes	03	Yes
22.	Fingerprint Based Biometric ATM Authentication System, Vol. 3, Issue 11, June 2014, pp.22-28.	International Journal of Engineering Inventions	e-ISSN: 2278-7461, p-ISSN: 2319-6491	Yes	NIL	Yes
23.	Computation of Various Ionospheric Constraints at GPS Operating Frequency Bands, Vol. 5, Issue 6, Jun. 2014, pp. 372-376.	International Journal of Scientific & Engineering Research	ISSN 2229-5518	Yes	NIL	Yes
24.	Validation of GPS Receiver Instrumental Bias Results for Precise Navigation, Vol. 42, June 2013, pp. 175-181.	Indian Journal of Radio & Space Physics	ISSN No: 0367-8393	Yes	NIL	Yes
25.	Validation of Algorithms for Datum Transformations and Map Projections, Vol. 4, Issue 6, June 2013, pp. 376-381.	International Journal of Scientific & Engineering Research	ISSN No: 2229-5518	Yes	NIL	Yes



26.	Real-Time Estimation of Ionospheric Delay using Dual Frequency GPS Observations, Vol. 9, No. 15, May 2013, pp. 36-50.	European Scientific Journal	ISSN No: 1857 – 7431	Yes	NIL	Yes
27.	Data Acquisition Experiment using NovAtel Dual Frequency GPS Receiver, Vol. 2, Issue 5, May 2013, pp. 521-526.	International Journal of Engineering Research and Technology	ISSN No: 2278 – 0181	Yes	NIL	Yes
28.	Prominent Ambiguity Resolution Methods for TEC Estimation Using GPS Data, Vol. 2, Issue 5, May 2013, pp. 559-564.	International Journal of Engineering Research and Technology	ISSN No: 2278 – 0181	Yes	NIL	Yes
29.	Estimation of Prominent Global Positioning System Measurement Errors for GAGAN Applications, Vol. 9, No. 15, May 2013, pp. 68-81.	European Scientific Journal	ISSN No: 1857 – 7431	Yes	NIL	Yes
30.	Estimation of Total Electron Content and Instrumental Biases of Low Latitude Global Positioning System Stations Using Kalman Filter, Vol. 56, Issue 5, Sep-Oct 2010, pp. 235-241.	IETE Journal of Research	ISSN No: 0377-2063	Yes	3	Yes
31.	Effects of Pseudolite Positioning on	Positioning (Published by Scientific	ISSN No: 2150-	Yes	3	Co-Author

	DOP in LAAS, Vol.1, No.1, Nov. 2010, pp. 18-26.	Research Publishing, Inc.)	8526			
32.	Comparative Analysis of the Techniques for Estimation of GPS DOP over Indian Region, Vol. 55, Issue 1, Jan-Feb. 2009, pp. 28-34.	IETE Journal of Research	ISSN No: 0377-2063	Yes	3	Co-Author
33.	Significance of instrumental biases and dilution of precision in the context of GAGAN, Vol. 36 (5), Oct. 2007, pp. 405-410.	Indian Journal of Radio & Space Physics	ISSN No: 0367-8393	Yes	4	Co-Author

## 2. Conference Publications

S. No	Title of the paper	Title of Conference	Organised by	International/ National level
1.	Implementation of an Automatic Waste Segregator System using Arduino Uno	6th International Conference for Convergence in Technology (I2CT-2021), 2-4 April 2021, pp. 1-6.  ISBN # 978-1-7281-8876-8	Singhad Institute of Technology, Lonavala, India (Technically Co-Sponsored by IEEE Bombay Section)	International
2.	Smart Robotic Personal Assistant Vehicle Using Raspberry Pi and Zero UI Technology	6th International Conference for Convergence in Technology (I2CT-2021), 2-4 April 2021, pp. 1-6.  ISBN # 978-1-7281-8876-8	Singhad Institute of Technology, Lonavala, India (Technically Co-Sponsored by IEEE Bombay Section)	International

3.	Effect of Various Parameters on Minimum Mean Square Error and Adaptive Antenna Beamforming using LMS Algorithm	6th International Conference for Convergence in Technology (I2CT-2021), 2-4 April 2021, pp. 1-5.  ISBN # 978-1-7281-8876-8	Singhad Institute of Technology, Lonavala, India (Technically Co-Sponsored by IEEE Bombay Section)	International
4.	Implementation of Smart Urban Farming using Raspberry Pi, Arduino and Node-RED Platform	IEEE International Conference for Innovation in Technology (INOCON-2020), 6-8 Nov. 2020, pp.1-6.  ISBN # 978-1-7281-9744-9	Nagarjuna College of Engineering and Technology, Bengaluru, India (Technically Co-Sponsored by IEEE Bangalore Section)	International
5.	Raspberry Pi Based Smart Wearable Device for Women Safety using GPS and GSM Technology	IEEE International Conference for Innovation in Technology (INOCON-2020), 6-8 Nov. 2020, pp.1-5.  ISBN # 978-1-7281-9744-9	Nagarjuna College of Engineering and Technology, Bengaluru, India (Technically Co-Sponsored by IEEE Bangalore Section)	International
6.	Automatic Street Light Control System using Wireless Sensor Networks.	International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI-2017), Sept. 21-22, 2017, pp. 2915-2919.  ISBN: 978-1-5386-0814-2/17	Saveetha Engineering College, Chennai, India	International
7.	Web Based Environmental	International Conference on Current	Vidyavardhaka College of	International

	Monitoring System using Raspberry Pi.	Trends in Computer, Electrical, Electronics & Communication (ICCTCEEC-2017), Sept. 8-9, 2017, pp. 420-426.  ISBN: 978-1-5386-3243-7/17	Engineering, Mysuru, India (Technically Co-Sponsored by IEEE Bangalore Section)	
8.	WSN Based Automatic Irrigation and Security System using Raspberry Pi Board.	International Conference on Current Trends in Computer, Electrical, Electronics & Communication (ICCTCEEC-2017), Sept. 8-9, 2017, pp. 427-433.  ISBN: 978-1-5386-3243-7/17	Vidyavardhaka College of Engineering, Mysuru, India (Technically Co-Sponsored by IEEE Bangalore Section)	International
9.	Web Based Patient Health Monitoring System using Raspberry Pi.	2 <sup>nd</sup> International Conference on Contemporary Computing and Informatics (IC3I 2016), Dec. 14-17, 2016, pp. 568-574.  ISBN: 978-1-5090-5256-1/16	Amity University, Noida, India (Technically Co-Sponsored by IEEE UP Section)	International
10.	Attendance Recording and Consolidation System using Arduino and Raspberry Pi.	International Conference on Signal Processing, Communication Power & Embedded Systems (SCOPEs 2016), Oct. 3-5, 2016, pp. 1240-1245.  ISBN: 978-1-5090-4620-1/16	Centurion University of Technology & Management, Paralakhemundi, Odisha (Technically Co-Sponsored by IEEE Bhubaneswar Subsection)	International
11.	Implementation of Speech Based Home Automation System using Bluetooth and GSM.	International Conference on Signal Processing, Communication Power & Embedded Systems	Centurion University of Technology & Management, Paralakhemundi	International

		(SCOPES 2016), Oct. 3-5, 2016, pp. 807-813.  ISBN: 978-1-5090-4620-1/16	di, Odisha	
12.	Children Location Monitoring on Google Maps using GPS and GSM Technologies.	6 <sup>th</sup> IEEE International Advance Computing Conference (IACC 2016), Feb. 27-28, 2016, pp. 711-715.  ISBN: 978-1-4673-8286-1/16	S.R.K.R. Engineering College, Bhimavaram	International
13.	Implementation of Interactive Home Automation Systems Based on Email and Bluetooth Technologies.	IEEE International Conference on Information Processing (ICIP 2015), Dec. 16-19, 2015, pp. 458-463.  ISBN: 978-1-4673-7758-4/15	Vishwakarma Institute of Technology, Pune	International
14.	Implementation of Microcontroller Based Driver Assistance and Vehicle Safety Monitoring System.	IEEE International Conference on Information Processing (ICIP 2015), Dec. 16-19, 2015, pp. 423-428.  ISBN: 978-1-4673-7758-4/15	Vishwakarma Institute of Technology, Pune	International
15.	Remote Monitoring and Control of a Mobile Robot System with Obstacle Avoidance Capability.	4 <sup>th</sup> International Conference on Advances in Computing, Communications & Informatics (ICACCI), Aug. 10-13, 2015, pp. 1803-1809.  ISBN: 978-1-4799-8792-4/15	SCMS Group of Institutions, Aluva, Kochi, Kerala (Technically Co-Sponsored by IEEE)	International
16.	An Intelligent Surveillance with Cloud Storage for Home Security.	The 11 <sup>th</sup> IEEE India Conference "INDICON 2014", Dec. 11-13, 2014, pp.	IEEE Pune Section at Yashada, Pune, India	International

		1-6. ISBN: 978-1-4799-5364-6		
17.	Physiological Signals and Vehicle Parameters Monitoring System For Emergency Patient Transportation	International Conference on Nano, Bio & Material Sciences (ICONBMS-2014), Jan. 8-10, 2014	Nizam College, Osmania University, Hyderabad	International
18.	Improved Ionospheric Time Delay Correction of GAGAN for Unmanned Air Vehicle Applications	2 <sup>nd</sup> International Conference on Recent Advances in Design, Development and Operation of Micro Air Vehicles (ICRAMAV-2013), Nov. 21-23, 2013.  ISBN: 978-93-5107-169-3	Jawaharlal Nehru Technological University, Hyderabad	International
19.	Comparison and Validation of GPS Receiver Instrumental Bias Results for Precise Navigation	Pearl Jubilee International Conference on Navigation and Communication (NAVCOM-2012), Dec. 20-21, 2012.	NERTU (Osmania University) and DRDO, Hyderabad	International
20.	Application of Least Squares Adjustment Technique for Estimation of TEC and Instrumental Biases for GAGAN Applications	XXIXth General Assembly of International Union of Radio Science (URSIGA 2008), Aug. 7-16, 2008.	International Union of Radio Science, at Chicago, USA	International
21.	Prominent methods for Estimation of Instrumental Biases for GAGAN Applications	3 <sup>rd</sup> International Conference on Computers and Devices for Communication (CODEC-06), Dec. 18-20, 2006.	Institute of Radio Physics and Electronics, University of Calcutta, Kolkata	International
22.	Analysis of dual frequency GPS data for improving position accuracy	International Conference ICORG 2006, June 5-8, 2006.	Jawaharlal Nehru Technological University,	International

			Hyderabad	
23.	Application of Kalman filter technique for estimation of Ionospheric TEC over low latitude regions using GPS data	XXVIIIth General Assembly of International Union of Radio Science (URSIGA 2005), Oct. 23-29, 2005.	International Union of Radio Science, at New Delhi, India.	International
24.	A Kalman filter approach for estimation of instrumental biases and ionospheric total electron content for GPS applications	Asia Pacific Microwave Conference (APMC-2004), Dec. 15-18, 2004.	University of Delhi, New Delhi	International
25.	Thinning of Binary and Gray Tone Images using Artificial Neural Networks	International Conference Systemics, Cybernetics & Informatics (ICSCI-2004), Feb. 12-15, 2004.	Pentagram Research Centre, Hyderabad	International
26.	Prominent datum conversions for GPS Applications	International Conference on Computers and Devices for Communication (CODEC-04), Jan. 1-3, 2004.	Institute of Radio Physics and Electronics, University of Calcutta, Kolkata	International
27.	Prominent Metrics in Multimedia Streaming over Mobile Broadcast Networks	National Conference on Circuits Signals and Systems -2015 (NCCSS-2015), Jan. 22-24, 2015.  ISBN: 978-93-82570-47-9	Mukaffam Jah College of Engineering & Technology, Hyderabad	National
28.	Implementation of PIC Microcontroller based Vehicle Monitoring System using Control Area Network (CAN) Protocol	National Conference on Robotics, Automation and Mechatronics (NCRAM-2014), Mar. 12-13, 2014.  ISBN: 978-93-83635-01-6	Jawaharlal Nehru Technological University Hyderabad	National

29.	Estimation of Prominent Ionospheric Effects at GPS Frequencies	44 <sup>th</sup> Mid-Term Symposium on “ICT in Space, Defence and Industrial Applications”, Apr.21-22, 2013.	IETE Hyderabad Centre, Hyderabad	National
30.	Fitted Receiver bias Estimation of GPS using Night-time Data	National Space Science Symposium (NSSS-2010), Feb. 24-26, 2010.	Saurashtra University, Rajkot	National
31.	Hardware and Software Aspects of Dual Frequency GPS Receiver	Silver Jubilee National Conference on Global Navigation Satellite System and its Applications (GNSS-2007), Oct. 25-26, 2007.	NERTU, Osmania University, Hyderabad	National
32.	A Single-Site Technique for Real-Time Estimation of Ionospheric Delay	Silver Jubilee National Conference on Global Navigation Satellite System and its Applications (GNSS-2007), Oct. 25-26, 2007.	NERTU, Osmania University, Hyderabad	National
33.	Comparative Analysis of Prominent GPS Ionospheric Delay Smoothing Algorithms	National Conference on Intelligent Systems (NCIS-2007), Aug.24-25, 2007.	M.J. College of Engineering & Technology, Hyderabad	National
34.	Resolving Integer Ambiguities and Cycle Slips for TEC Estimation Using GPS Data	XIV National Space Science Symposium (NSSS-2006), Feb. 9-12, 2006.	Andhra University, Visakhapatnam	National
35.	Analysis of TEC per degree variation along southern latitude region for Indian WAAS	National Symposium on GPS and its Applications (NAVSYM'02), 19 <sup>th</sup> December 2002.	NERTU, Osmania University, Hyderabad	National



36.	Estimation of Instrumental Biases and TEC using Kalman Filter	39 <sup>th</sup> Annual convention and meeting on 'Sustainability Science and Environmental Geophysics', Oct. 4-6, 2002.	NEERI, Nagpur	National
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### 3. Invited Lectures / Chairmanship in Conferences / Seminars

S. No	Title of Lecture	Title of Conference / Seminar etc.	Organised by
1.	Chairman of Paper Presentation Session, (April 3, 2021, 16:00 – 18:15 Hrs) Track C3 : Robotics, Control, Instrumentation and Automation /Power Electronics	6 <sup>th</sup> International Conference for Convergence in Technology (I2CT-2021), Sept. 21-22, 2017, Pune, India (Technically Co-Sponsored by IEEE Bombay Section.	Singhad Institute of Technology, Lonavala, Pune, India
2.	Chairman of Paper Presentation Session, (April 4, 2021, 11:45 – 13:45 Hrs) Track D2 : RF Circuits, Systems and Antennas /Computational Intelligence	6 <sup>th</sup> International Conference for Convergence in Technology (I2CT-2021), Sept. 21-22, 2017, Pune, India (Technically Co-Sponsored by IEEE Bombay Section.	Singhad Institute of Technology, Lonavala, Pune, India
3.	ARM Processor Overview, (Feb. 2, 2020, 10:00 – 11:30 Hrs)	AICTE Sponsored Online FDP on “Recent Trends in IoT Using Embedded Systems”	Mahatma Gandhi Institute of Technology, Hyderabad.
4.	ARM Processor Overview, (Dec. 9, 2020, 10:00 – 11:30 Hrs)	AICTE Sponsored Online FDP on “Recent Trends in IoT Using Embedded Systems”	Mahatma Gandhi Institute of Technology, Hyderabad.
5.	Overview of GPS and SBAS (Coordinate Systems) (Dec. 10, 2020, 9:30 – 11:00 Hrs)	AICTE Sponsored Online STTP on “Current Trends and Emerging Advances in Marine Navigation and Communication”	Chaitanya Bharathi Institute of Technology, Hyderabad.
6.	Fundamentals of ARM Processor (Nov. 24, 2020, 11:40 – 01:10 Hrs)	AICTE-ISTE Sponsored One Week Online Refresher Course on “Programming in Internet of Things”	Dept. of CSE, JNTUH CEJ.

7.	Overview of GNSS and GPS Receiver Data Processing (Aug. 25, 2020)	AICTE Sponsored Online STTP on “Signal Processing Techniques for Advanced Wireless Technologies”	Jayamukhi Institute of Technological Sciences, Warangal.
8.	GNSS Overview and GPS Receiver Data Processing, (Aug. 4, 2018, 11:00 – 13:00 Hrs)	IETE Students Association (KEIS) Seminar	Kamala Institute of Technology and Science, Huzurabad.
9.	GNSS Reference Coordinate System, (June 7, 2018, 14:00 – 15:30 Hrs)	One Week Faculty Development Program on Principles of GNSS, Applications and Research Areas	Dept. of ECE, Osmania University and CBIT, Hyd.
10.	Chairman of Paper Presentation Session, (Sept. 8, 2017, 15:30 – 17:00 Hrs)	International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI-2017), Sept. 21-22, 2017.	Saveetha Engineering College, Chennai, India
11.	Chairman of Paper Presentation Session, (Sept. 8, 2017, 15:30 – 17:00 Hrs)	International Conference on Current Trends in Computer, Electrical, Electronics & Communication (ICCTCEEC-2017), Sept. 8-9, 2017.	Vidyavardhaka College of Engineering, Mysuru, India (Technically Co-Sponsored by IEEE Bangalore Section)
12.	Chairman of Paper Presentation Session on Signal, Image and Multimedia Processing, (Jan. 6, 2017, 14:00 – 15:30 Hrs)	7th IEEE International Advanced Computing Conference (IACC 2017), Jan. 5-7, 2017	VNR Vignana Jyothi Institute of Engineering & Technology, Hyderabad
13.	Hardware Aspects of GPS Receiver and its Data Processing, (Dec. 23, 2016, 11:30 – 13:00 Hrs)	IETE National Level Faculty Development Program on Signal Processing and its Applications	Kamala Institute of Technology and Science, Huzurabad.
14.	Chairman of Paper Presentation Session, (Oct. 4, 2016, 16:00 – 17:30 Hrs)	International Conference on Signal Processing, Communication Power & Embedded Systems (SCOPES 2016), Oct. 3-5, 2016	Centurion University of Technology & Management, Paralakhemundi, Odisha (Technically Co-Sponsored by IEEE Bhubaneswar Subsection)

15.	GPS Orbits, Coordinate Systems and Receiver Data Processing, (April 6, 2016, 11:00 – 12:30 Hrs)	One Day Symposium on Global Positioning System and its Augmentation	Bhoj Reddy Engineering College for Women, Hyderabad
16.	Chairman of Paper Presentation Session-2J, (Feb. 27, 2016, 16:00 – 18:00 Hrs)	6 <sup>th</sup> IEEE International Advanced Computing Conference (IACC 2016), Feb. 27-28, 2016	Jointly organized by IEEE Computer Society, India and SRKR Engineering College, Bhimavaram
17.	Chairman of Paper Presentation Session-3F, (Feb. 28, 2016, 08:30 – 11:00 Hrs)	6 <sup>th</sup> IEEE International Advanced Computing Conference (IACC 2016), Feb. 27-28, 2016	Jointly organized by IEEE Computer Society, India and SRKR Engineering College, Bhimavaram
18.	Application of MATLAB for GNSS Data Processing, (Dec. 4, 2015, 11:00 – 13:00 Hrs)	One Week Workshop on MATLAB for Engineering Applications, 30 Nov. 2015 - Dec. 5, 2015	Sree Chaitanya College of Engineering, Karimnagar in association with IETE Centre, Warangal
19.	Co-Chair of Session F: (Nov. 29, 2015, 15:00 – 16:15 Hrs)	IEEE Asia Pacific Conference on Postgraduate Research in Microelectronics and Electronics (PrimeAsia 2015), Nov. 27-29, 2015	Joint chapter of CAS/EDS Societies, IEEE Hyderabad Section, In association with Vasavi College of Engineering, Hyd.
20.	Chairman of Session: Electronics & Communication Engineering (Oct. 10, 2015, 14:15–16:00 Hrs.)	International Conference on Emerging Trends in Science Technology Engineering and Management (ICETSTEM2015), Oct. 9-10, 2015	Malla Reddy Engineering College, Hyderabad
21.	ARM7 LPC2148 Microcontroller and Applications (3 <sup>rd</sup> October 2015, 11:00 – 12:30 Hrs.)	Delivered Expert Guest Lecture.	Dept. of ECE, Bhoj Reddy Engineering College, Hyderabad
22.	ARM7 LPC2148 Microcontroller and its Interfacing (26 <sup>th</sup> Sep. 2015, 11:30 – 13:00 Hrs.)	Delivered Expert Guest Lecture.	Dept. of ECE, CMR of Inst. of Technology, Hyderabad
23.	ARM7 LPC2148 Microcontroller and	Delivered Expert Guest Lecture.	Dept. of ECE, Mahatma Gandhi Inst.

	Applications (12 <sup>th</sup> Sep. 2015, 11:00 – 12:30 Hrs.)		of Technology, Hyderabad
24.	Chairman of Poster Session-2, (Aug. 12, 2015, 15:30 – 16:30 Hrs)	4 <sup>th</sup> International Conference on Advances in Computing, Communications & Informatics (ICACCI 2015), Aug. 10-13, 2015	SCMS Group of Institutions, Aluva, Kochi, Kerala (Technically Co-Sponsored by IEEE)
25.	Chairman of Session : Pattern Recognition, Signal and Image Processing, (Aug. 12, 2015, 16:30 – 18:00 Hrs)	4 <sup>th</sup> International Conference on Advances in Computing, Communications & Informatics (ICACCI 2015), Aug. 10-13, 2015	SCMS Group of Institutions, Aluva, Kochi, Kerala (Technically Co-Sponsored by IEEE)
26.	Chairman of Session-2, (Mar. 27, 2015, 11:30 – 13:00 Hrs)	2 <sup>nd</sup> National Conference on Advances in Wireless Communications (NCAWC-2015), Mar. 26-27, 2015	Dept. of ECE, Vasavi College of Engg., Hyderabad
27.	Global Navigation Satellite Systems (23 <sup>rd</sup> Mar. 2015., 14:00 – 15:30 Hrs.)	Delivered Expert Guest Lecture.	Dept. of ECE, CMR Inst. of Technology, Hyderabad
28.	Embedded Systems (23 <sup>rd</sup> Feb. 2015, 14:00 – 15:30 Hrs.)	Delivered Expert Guest Lecture.	Dept. of ECE, CMR Inst. of Technology, Hyderabad
29.	Overview of GNSS (21 <sup>st</sup> Feb. 2015, 11:30 – 13:00 Hrs.)	Delivered Invited Lecture.	Dept. of ECE, Shadan College of Engg. & Tech., Hyderabad
30.	Embedded Systems (3 <sup>rd</sup> Nov. 2014, 11:00 – 12:30 Hrs.)	Delivered Invited Lecture.	Dept. of ECE, J.B. Inst. of Engineering & Technology, Hyderabad
31.	Datum Conversions and Map Projections for GNSS Applications (28 <sup>th</sup> Mar. 2014, 13:30 – 15:30 Hrs)	All India Seminar on Recent Developments in Electronics and Communication Engineering, Mar. 28-29, 2014	The Institution of Engineers (India), Hyderabad
32.	Co-Chairman of Session A5: Indian Regional Navigational Satellite System-1, (09:30 – 11:15 Hrs)	Pearl Jubilee International Conference on “Navigation and Communication (NAVCOM-2012)”, December 20-21, 2012	NERTU (Osmania University) and DRDO, Hyderabad

33.	GPS Data Formats	A Three week SERC School on “GPS Applications and Atmospheric Constraints”, 13 Jun.- 03Jul., 2012 (Sponsored by DST, New Delhi)	Research & Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad
34.	Data Acquisition and Processing for TEC Estimation	A Three week SERC School on “GPS Applications and Atmospheric Constraints”, 13 Jun.- 03Jul., 2012 (Sponsored by DST, New Delhi)	Research & Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad
35.	Hardware and Software Aspects of DL-4 plus Dual Frequency GPS Receiver	A One Day Workshop on Modernization Aspects of GNSS and its Applications, 17 <sup>th</sup> Dec. 2011	Research & Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad
36.	Coordinate Systems for GPS	A Two Day Workshop on Basics of GPS and its Applications, Dec. 23-24, 2010	Chaitanya Bharathi Institute of Technology, Hyderabad
37.	Reference Coordinate Systems and Timing systems for GNSS Applications	A Three-week UGC sponsored refresher course on Integrated Survey with DGPS and Total Station, Nov. 8-29, 2010	UGC-Academic Staff College, JNTU Hyderabad
38.	Reference Coordinate Systems for GNSS Applications	A Four Day Intensive Course on Overview of GNSS and its Application, Nov. 9-12, 2010	Research & Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad
39.	Reference Coordinate Systems	A Three Day Intensive Course on Global Navigation Satellite Systems, Dec. 3-5, 2008	Research & Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad
40.	Kalman filter and bias estimation	A Three week SERC School on “Atmospheric Effects on GPS Aided Geo Augmented Navigation (GAGAN)”, 14 Nov.- 04 Dec., 2007 (Sponsored by DST, New Delhi)	Research & Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad

41.	Reference Coordinate Systems	A Three Day Intensive Course on Global Navigation Satellite Systems, Nov. 15-17, 2006	Research & Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad
42.	Datums and Coordinate Systems	A Three-week SERC School on “GPS Augmentation Systems and Atmospheric Corrections”, 23 Nov.-13 Dec., 2005 (Sponsored by DST, New Delhi)	Research & Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad
43.	GPS Orbits and Time References	A Three-week SERC School on “GPS Augmentation Systems and Atmospheric Corrections”, 23 Nov.-13 Dec., 2005 (Sponsored by DST, New Delhi)	Research & Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad
44.	Datums and Coordinate Systems	A Three Day Intensive Course on “Global Positioning System and its Applications”, Jan. 21-23, 2004	Research & Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad
45.	GPS Orbits and Time References	A Three Day Intensive Course on “Global Positioning System and its Applications”, Jan. 21-23, 2004	Research & Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad

#### 4. Refresher Courses/ Summer schools attended

S. No	Programme	Duration	Organized by
1.	One Week Online FDP on “Outcome Based Education - A Continuous Quality Improvement of the Program”	17 <sup>th</sup> Aug. 2020 to 21 <sup>st</sup> Aug. 2020  (1 week)	Dept. of CSE, Sagi Rama Krishnam Raju Engineering College, Bhimavaram, A.P.
2.	Online Short Term course on “MOOCs, e-Content Development and Open Educational Resources”	13 <sup>th</sup> July - 18 <sup>th</sup> July 2020  (1 week)	UGC Human Resource Development Centre, JNTUH, Hyderabad
3.	Online Short Term on “Outcome Based Education: Curriculum	21 <sup>st</sup> July - 27 <sup>th</sup> July 2020	UGC Human Resource Development Centre,

	Design, Teaching, Learning and Assessment Strategies”	(1 week)	JNTUH, Hyderabad
4.	Faculty Updation Program (FUP) on “Digital System Design using Verilog HDL”	5 <sup>th</sup> May 2015 to 9 <sup>th</sup> May 2015 (1 week)	Centre for Development of Advanced Computing (C-DAC, Hyderabad)
5.	Faculty Updation Program (FUP) on “VLSI Design”	2 <sup>nd</sup> Jun. 2014 to 7 <sup>th</sup> Jun. 2014 (1 week)	Centre for Development of Advanced Computing (C-DAC, Hyderabad)
6.	Faculty Updation Training Programme on “Electronics Packaging and PCB Design”	24 <sup>th</sup> Jun. 2013 to 5 <sup>th</sup> Jul. 2013 (2 weeks)	Centre for Development of Advanced Computing (C-DAC, Hyderabad)
7.	Training Programme on “Advanced ‘C’ Programming and Intel 8051 Microcontroller”	3 <sup>rd</sup> Jun. 2013 to 10 <sup>th</sup> Jun. 2013 (1 week)	VEDA Institute of Information Technology Pvt. Ltd. (VEDA IIT), Hyderabad
8.	A Three week SERC school on “GPS Applications and Atmospheric Constraints” (Observer for the Course)	13 <sup>th</sup> Jun. 2012 to 3 <sup>rd</sup> Jul. 2012 (3 weeks)	Research & Training Unit for Navigational Electronics, Osmania University Hyderabad
9.	A Three week SERC school on “Atmospheric effects on GAGAN”	14 <sup>th</sup> Nov. 2007 to 4 <sup>th</sup> Dec. 2007 (3 weeks)	Research & Training Unit for Navigational Electronics, Osmania University Hyderabad
10.	Internetworking	21 <sup>st</sup> Jan. 2002 to 2 <sup>nd</sup> Feb. 2002 (2 weeks)	JNTU College of Engineering, Hyderabad
11.	Virtual and Intelligent Instrumentation	21 <sup>st</sup> May 2001 to 2 <sup>nd</sup> Jun. 2001 (2 weeks)	Karunya Institute of Technology, Coimbatore
12.	Training Programme for Young Faculty of Engineering Colleges	26 <sup>th</sup> Dec. 2000 to 13 <sup>th</sup> Jan. 2001 (3 weeks)	University College of Engineering, Osmania University, Hyderabad
13.	Medical Instrumentation and Informatics	5 <sup>th</sup> June 2000 to 16 <sup>th</sup> June 2000 (2 weeks)	Regional Engineering College, Warangal

## 5. Participation in Short Courses/ Workshops/ Seminars

### *Participation in Seminars / Tutorials : 17*

- i) National Level Online Seminar on “Implementation of National Education Policy-2020”, 31<sup>st</sup> March 2021, Department of CSE, JNTUHCEJ, Jagtial.
- ii) IETE Hyderabad Centre Foundation Day and Memorial Lecture-2 (Webinar 14) : Marine Navigation and Communication : Past, Present and Emerging Trends in India, 11<sup>th</sup> October 2020.
- iii) IETE Knowledge Sharing Webinar on “Missile Technology, Indian Initiative”, 9<sup>th</sup> August 2020, IETE, Hyderabad Centre.
- iv) Webinar on “Role of Indian Space Program in New Space Age”, 8<sup>th</sup> August 2020, IEEE, Bangalore.
- v) Webinar on “NAAC Assessment and Accreditation Process, 3<sup>rd</sup> July 2020, UGC, HRDC, JNTUH, Hyderabad.
- vi) Webinar on “Raspberry Pi and Python Programming Basics”, May 25-27, 2020, Organised by Think IoT Solutions, Hyderabad.
- vii) Webinar on “Post Covid-19 Resurgence of Indian Industry and R & D”, 15<sup>th</sup> May 2020, SRM University, Andhra Pradesh.
- viii) Tutorial on “VLSI Physical Design and Analog IC Design”, National Conference on Circuits Signals and Systems – 2015, 22<sup>nd</sup> January 2015, MJCET, Hyderabad.
- ix) One Day Tutorial on “Reliable Real Time Embedded Systems”, 11<sup>th</sup> IEEE India Conference Indicon 2014, 11<sup>th</sup> December 2014, Yashada, Pune.
- x) National Instruments Technical Symposium 2014, 26<sup>th</sup> September 2014, Organised by National Instruments, Hyderabad.
- xi) One Day Seminar on “MATLAB & Simulink for Engineering Education”, MathWorks India, Hyderabad, 11<sup>th</sup> August 2014.
- xii) Tutorial on “Recent Advances in Antenna Design & Applications”, 29<sup>th</sup> March 2014, University College of Engineering, Osmania University, Hyderabad.
- xiii) One Day Seminar entitled “Oracle Higher Education Seminar”, organized by Oracle India (P) Ltd., 22<sup>nd</sup> January 2013, Hyderabad.
- xiv) Tutorial on “Services over IP: Implementation Options and Challenges”, Research & Training Unit for Navigational Electronics”, Osmania University, Hyderabad, 13<sup>th</sup> July 2010.
- xv) One Day Seminar in observance of World Telecom & Information Society Day, IETE, Hyderabad, 17<sup>th</sup> May 2010.
- xvi) Silver Jubilee Seminar on “Future GPS and its Issues”, Research & Training Unit for Navigational Electronics”, Osmania University, Hyderabad, 7<sup>th</sup> September 2007.
- xvii) One Day Seminar on “Technological Challenges in Hypersonic Systems and Reusable Launch Vehicles”, DRDL, Hyderabad, 24<sup>th</sup> January 2006.

### *Participation in Short term training courses of less than one week duration : 20*

- i) A Two-Day Workshop on “NBA Accreditation Process - SAR Preparation: Post Graduate Engineering Programs” organized by IQAC & Dept of CSE, VR Siddhartha Engineering College, Visakhapatnam, A.P. (under AICTE Margdarshan).
- ii) A Three-Day National Workshop (Online) on Outcome based Education and NBA Accreditation (SAR Preparation and Assessment), University College of Engineering (Autonomous), Osmania University, Hyderabad, August 12-14, 2020.
- iii) Two Day Online Training Programme on “Android App Development for Embedded System”, EdGate Technologies Pvt. Ltd., Bangalore, July 1-2, 2020.



- iv) Three Day Online Workshop on “Online Course Design, Development and Delivery”, HRDC, University of Hyderabad, Hyderabad, May 6-8, 2020.
- v) Two Day National Workshop on “Preparing for NBA Accreditation & SAR filling”, JNTUH CEH, Hyderabad, February 18-19, 2019.
- vi) The Things Conference – Redefining IoT with LoRaWAN, HICC, Hyderabad, Nov.9-10, 2018.
- vii) HyWIT 2018 – Workshop Series on “5G Wireless Communication”, IIT and IIT Hyderabad, Sep. 15, 16, 22 & 23, 2018.
- viii) One Day National Level Workshop on “Outcome Based Education & Accreditation”, JNTUH CEJ, Jagtial, Oct. 19, 2016.
- ix) Two Day Workshop on “Internet of Things”, JNTUHCEJ, Jagtial, Jan. 28-29, 2016.
- x) 3<sup>rd</sup> Conference Organizers Workshop (COW-2015), Organized by IEEE India Council and IEEE Hyderabad Section, TCS, Madhapur, Hyd., 25<sup>th</sup> April 2015.
- xi) Two Day Workshop on Analog IC Design – Spec to Reality, Vasavi College of Engineering, Hyderabad, September 18-19, 2014.
- xii) Workshop on “e-Learning”, MVSR Engg. College, Hyderabad, 30<sup>th</sup> August, 2014.
- xiii) Two Day Workshop on “Modern Navigation”, R & T Unit for Navigational Electronics, Osmania University, Hyderabad, November 29-30, 2013.
- xiv) Two Day Workshop on “System on Chip (SoC) Design”, Muffakham Jah College of Engg. & Tech., Hyderabad, August 17-18, 2013.
- xv) Two Day National Workshop on “Perspectives in Teaching – A Multi Dimensional Approach to Enhance Pedagogical Skills in Professional Teachers”, JNTUHCEJ, Karimnagar, April 1-2, 2011.
- xvi) Two Day National Workshop on “Digital Learning Technologies” organized by JNTUH & CDAC, March 4<sup>th</sup> & 5<sup>th</sup> 2011.
- xvii) Workshop on “Embedded System”, Pantech Solutions (P) Ltd., Hyderabad, 19<sup>th</sup> September 2009.
- xviii) Datum Coordinate System and Map Projection, Survey Training Institute, Survey of India, July 19 –21, 2006.
- xix) One Day intensive course on “Smart Antennas for Wireless Communications”, R & T Unit for Navigational Electronics”, Osmania Univ., Hyderabad, 16<sup>th</sup> Dec. 2002.
- xx) Three-Day Workshop on “Microcontrollers”, M.J. College of Engineering & Technology, Hyderabad, November 15-17, 2001.

## K. Any Other Information

1.	Contributed for various activities related to conduct of <u>Two</u> Department of Science & Technology, New Delhi sponsored Three-week SERC schools and <u>One</u> National Conference at Research & Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad (2005-08).
2.	Passed NCC ‘A’, ‘B’, and ‘C’ certificates (1987, 1991, 1992)

Date: 11<sup>th</sup> November 2021

(Dr. Dhiraj Sunehra)