

Five Day Short Term Training Program

on

"Recent Research Developments and Challenges
in Communication and Navigation Technologies"

25-29 February, 2020

Sponsored by
TEQIP - III



CERTIFICATE

This is to certify that Mr. / Ms. / Dr. / Prof. ✓ SWAPNA RAGHUNATH, ASSOC. PROFESSOR
of GINITS, HYDERABAD has participated
in the Five Day Short Term Training Program on "Recent Research Developments and Challenges in Communication and Navigation Technologies" Sponsored by TEQIP - III, Organized by Department of Electronics and Communication Engineering (ECE), University College of Engineering (UCE), Osmania University (OU), Hyderabad, Telangana in association with Department of Electronics and Telecommunication Engineering, Veer Surendra Sai University of Technology, Burla, Odisha during February, 25-29, 2020.

Dr. Harish Kumar Sahoo
STTP Co-Convener
Asso. Prof, VSSUT, Burla

Dr. P. Naveen Kumar
STTP Convener
Asso. Prof, UCE, OU

Prof. B. Rajendra Naik
Head
Dept. of ECE, UCE, OU

Prof. M. Kumar
Principal
UCE, OU

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Curriculum Vitae

Prof. Dr. PERUMALLA NAVEEN KUMAR

Professor

BE(ECE) M.Tech(ECE) Ph.D(ECE) Specialization : Global and Regional Navigation
Satellite Systems, GPS, Indian NavIC and GAGAN



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Mobile : 9985701254

Office

Department of Electronics & Communication
Engineering, University College of Engineering,
Osmania University, Hyderabad, Telangana -
500007

Home

H.No: 3-16-8, Nehru Nagar, Ramanthapur,
Hyderabad, Telangana- 500013

Education

S.No	Degree	Year	Subject	University/Institution
1	B.E	1999	Electronics & Communication Engineering	Osmania University, Hyderabad, Telangana, India
2	M.Tech	2003	Electronics & Communication Engineering (DSCE)	Jawaharlal Nehru Technological University, Hyderabad, India
3	Ph.D	2014	Electronics & Communication Engineering (GPS and GAGAN)	Osmania University, Hyderabad, Telangana, India

Work Experience - 22 years

S. No	Positions Held	Name of the Institute	From	To
1	Professor	Dept. of ECE, University College of Engg., Osmania University,	11-06-2018	Till date


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	Electron Content using Single Frequency GPS receiver data for low-latitude			Technical Education Quality Improvement Program (TEQIP)-Phase-II, UCE, OU, India	(Principal Investigator) Published work in National and International Conferences.
3	Investigation & analysis of Ionospheric Time Delay Effects using NavIC data for Civilian Navigation Applications	2017-2020 (3 Years)	19.81	Space Application Center, Indian Space Research Organization (ISRO), Dept. of Space, Govt. of India, India	Successfully Completed (Principal Investigator) Published work in refereed Journals/Conferences.
4	IRNSS Navigation Receiver Field Trail and data collection	15-09-2016 to 14-09-2021 (5 Years)	56 Lakhs	MoU project between Osmania University and Space Application Center, Indian Space Research Organization (ISRO), Dept. of Space, Govt. of India, India.	In Progress (Principal Investigator) Published work in refereed Journals/Conferences.

Ph.D. Scholars under my Guidance


S.No	Project Title	Roll No	Student Name	Status
1	Investigation & analysis of Ionospheric Time Delay Effects at	100520174030	D. Kavitha	Full time (Pipeline in



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	low latitude region for Civilian Navigation Applications			submission of Thesis) (ISRO Project JRF)
2	Investigation of Interoperability of IRNSS with Other GNSS under Various Conditions for Future Civilian Navigation Applications	100520174045	N. Santhosh	Full time (Pipeline in submission of Thesis) (CSIR Fellowship)
3	Navigation Parameters Enhancement Techniques Using Multi Constellation Satellite Signals	100520174062	Devadas Kuna	Full time (Pipeline in submission of Thesis) (UGC SRF Fellowship)
4	Investigation of methods for improving the performance of modern navigation systems in India	10052017404	Madhu Krishna	Part time
5	Performance analysis of Indian Regional Navigation Satellite System (IRNSS) and Development of Error Mitigation Techniques	10052017431	T. Sridhar	Part time
6	Investigation of various methods for improvement in position using NavIC/GNSS data over Indian subcontinent	100520174074	R Anil Kumar	Full time (RGNF FELLOWSHIP)
7	Evaluation of the Performance of Satellite Navigation signals in the context of marine environments	10052018401	R.P. Naraiah	Full Time
8	GNSS/IRNSS	10020184061	S. Srikanth	Full Time
9	Investigation of Ionospheric Scintillation using GNSS/IRNSS data over Indian region	100520184062	G.Chandra Shekar	Full Time
10	Investigation of performance improvement of GNSS/IRNSS for	100520184064	S.Krishna	Full Time


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	civilian navigation Applications			
11	GNSS/IRNSS	100520194001	N. Koteswara Rao	Part time

Seminars Organized

S.No.	Details	Year
1	Organized a Short-Term Course on "Hardware and Software aspects of Computers" at Dept. of ECE, Osmania University, as a part of Community Service Development Program.	October 2008
2	Organized an Intensive Course on "PC Assembling and Maintenance" at Dept. of ECE, Osmania University, as a part of Community Service Development Program.	March 2008
3	Organized a IEEE workshop on "GNSS and its Applications", at Dept. of ECE, Osmania University, as a part of Community Service Development Program.	19 th October 2016
4	Organized One-week FDP Training program on "Principles of GNSS, Applications and Research Areas" at Advanced GNSS Research Laboratory (AGRL)", Department of ECE, University College of Engineering(A), Osmania University	4 th -9 th June 2018
5	Organized One day seminar on "Research Methodologies and Opportunities in Communication Engineering" at ECE, University College of Engineering(A), Osmania University	25 th April 2018
6	Organized One day seminar on "Acquisition of GNSS signals", at ECE, University College of Engineering(A),	9 th September 2019


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	Osmania University	
7	Organized One day seminar on "Single frequency GNSS Receiver", at Department of ECE, University College of Engineering(A), Osmania University	9 th November 2019
8	Organized One day seminar on "Decode Your career" at Department of ECE, University College of Engineering(A), Osmania University	4 th September 2019
9	Organized Guest lecture on "Near Earth Space: Challenges and Achievements", at ECE, University College of Engineering(A), Osmania University	24 th February 2020
10	Organized Guest lecture on "Challenges in the Development of Scientific Payloads for Space Mission: Lessons Learnt" at ECE, University College of Engineering(A), Osmania University	24 th February 2020
11	One-week Short term training program on "Recent Research Developments and Challenges in Communication and Navigation Technologies"	25-29 February, 2020

Others

Establishment of New Research Laboratory:

Established a new State of the art-Advanced GNSS Research Laboratory (AGRL) in the Department of Electronics and Communication Engineering, Osmania University in collaboration with Space Applications Center, ISRO, Ahmedabad. This lab is equipped with the State of the art equipment related to Global and Regional Satellite Navigation Systems, which includes Dual and Triple frequency GRNSS receivers (received from ISRO and TEQIP Project), which can receive real-time satellite signals from United States' Global Positioning System (GPS), Russian' Global Navigation Satellite System (GLONASS), European Union' GALILEO, Chinese' Beidou, Japanese' Quazi Zenith /Satellite System (QZSS) and Indian' IRNSS/NavIC and Indian Satellite Based, GPS Aided GEO Augmented Navigation System (GAGAN) systems. These satellite receivers can receive Satellite signals at an altitude from 36,000Kms and 20,000Kms. In this research lab, the 'Performance Evaluation of Indian Regional Navigation Satellite System (IRNSS) receivers under various conditions"and also IRNSS Navigation Receiver Field Trip and Data Collection is being carried out. PhD Scholars, M.Tech and BE students are pursuing/carrying out their Research/Projects/Internships in this advance research laboratory.

Guest Lectures / Invited Talks

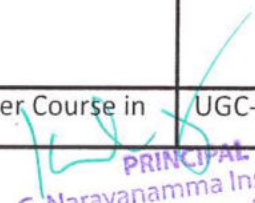
S.No.	Title of the	Title of	Organized
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	Lecture/Academic Session	Conference/Seminar	
1	Presented a Webinar on "Indian NavIC and other GNSS Research Analysis and Challenges"	Webinar	ACS College of Engineering, Department of Aerospace Engineering, Bengaluru, Karnataka, 05 th June, 2021
2	Delivered a Guest lecture on "Indian Space Program"	Discover India Program of Higher Defense Management Course (HDM-16)	College of Defense Management , Higher Defense Management Course, Secunderabad, 17 th February 2021
3	How to become successful	One week Orientation Program	Dr. B. R. Ambedkar Institute of Management and Technology, Hyderabad. 4-8 January, 2021
4	Keynote Address and chief guest	AICTE sponsored national e-conference "Technology for Impactful and Sustainable Development of the Society", TISDS-2020.	G Pullaiah College of Engineering and Technology, on 16-12-2020
5	Delivered a Guest lecture on "Marine Navigation"	AICTE Sponsored One-Week Short Term Training Program (Online Mode) On "Current Trends and Emerging Advances in Marine Navigation and Communication"	Chaitanya Bharathi Institute of Technology Department of ECE On 11 th December 2020
6	Delivered a talk on "Global Navigation Satellite Systems and its Augmentation systems"	AICTE Sponsored STTP on Signal Processing Technologies for Advanced Wireless Communication Technologies.	Jayamukhi Institute of Technological Science, Warangal, on 25 th November 2020.

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		(Online Mode)	
7	Delivered a talk on "Global Navigation Satellite System (GNSS) and its Applications"	Webinar	KL University, Department of Electronics & Communication Engineering" on 28 th August 2020
8	Delivered a talk on "Innovation, Design Thinking and Entrepreneurship (IDTE)"	FDP	Dept. of ECE, 1 st -6 th June 2020, SNIST, Hyderabad
9	Delivered webinar on "GNSS, its Applications and Research Trends"	Webinar	G. Pullaiah College of Engineering and Technology, Dept. of ECE, on May 15 th 2020
10	Delivered a Guest lecture on 'India's Space Program'	Higher Management Defense Course	College of Defense Management on 19 th February 2020
11	Delivered a Guest lecture on Global Positioning System	Guest lecture	ACE Engineering College On 30th Jan 2020
12	Delivered a guest talk on Global and Regional Navigation Satellite Systems	Seminar	VSSUT, Burla, Odisha During 5-7 December 2019
13	Delivered a lecture on	Refresher Course in	UGC-HRDC (Academic


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	Global Navigation Satellite System	Earth Sciences	Staff College), Osmania University, Hyderabad from 5-12 Dec 2019
14	Delivered a talk and had technical discussion related to NavIC	NavIC GAGAN Utilization Programme	17-21 September 2019 Space Application Centre (SAC), Indian Space Research Organization (ISRO),
15	Technical discussion on Military and Civilian Applications of NavIC	8 th International Conference on Innovations in Electronics and Communication Engineering, ICIECE-2019	Gurunanak Technical Institutions, Hyderabad, India. On 2 nd and 3 rd August 2019
16	Galileo and IRNSS	Delivered an invited talk on Galileo and IRNSS	OTH University, Amberg, Germany on 11 th July 2019
17	Osmania University and Research activities in Advanced GNSS Research	Delivered an invited talk on Osmania University and Research activities in Advanced GNSS Research	OTH University, Amberg, Germany on 10 th July 2019
18	IRNSS/NavIC	One Week Faculty Development program on "5G and GNSS Positioning"	Organized by Department of ECE, Geethanjali College of Engineering and Technology June 21 th , 2019.
19	INDIAN IRNSS/NavIC and its Applications	Talk on INDIAN IRNSS/NavIC and its Applications	MIT-ADT University, School of Engineering, Pune, Maharashtra Jan 30 th , 2019.
20	GPS/GNSS	2-Day Workshop on "GIS Concepts for Remote Sensing Applications"	BVRIT HYDERABAD College of Engineering for Women in association with IEEE CIS/GRSS Joint Chapter Hyderabad Section. Jan 8 th 2019
21	Global & Regional Satellite Navigation Systems	International Conference On "Innovations in Electronics & Communication	Gurunanak Technical Institutions, Hyderabad India. (Invited Talk)/Keynote address)

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		Engineering" (ICIECE – 2018)	
22	Space Communications	NASA Program	Ravindrabharathi International School, Hyderabad, India
23	Indian Regional Navigation Satellite Systems (IRNSS) and its Applications	International Conference On "Innovations in Electronics & Communication Engineering" (ICIECE – 2017)	Gurunanak Technical Institutions, Hyderabad India. (Invited Talk)/Keynote address)
24	Career opportunities for Electronics Engineers	Career opportunities in Engineering	Education and Career Guidance Cell, Hyderabad
25	Electronic Measurements and Instrumentation	Seminar on Electronic Instrumentation	Bharat College of Engg. And Technology, Hyderabad
26	GPS and its Applications	Seminar on Advanced Communication Systems	Aizza College of Engg. And Technology, Mancherial, Andhra Pradesh
27	Global Positioning System	Advanced Wireless Communication Systems	Sri Vanajari Seethaih College of Engg. And Technology, patancheru.
28	Industrial Electronics and Instrumentation	One week Short term course on skill up gradation.	DRDL, Hyderabad
29	Global Positioning Systems and its Applications	IEEE Regional Students Professional Awareness Congress-2010	IEEE and SR Engg. College, Warangal
30	GPS and its Applications	A Two day National Level Technical Workshop on "Surge for Technical Excellence and Proficiency". STEP-2011	Dept. of Electronics & Comm. Engg, Deccan College of Engg and Tech, Hyderabad


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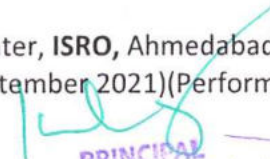
Awards/ Achievement

Awards

S.No	Name of Award	Awarding Agency	Year
1	Award for Excellence in Research	Initiative Global Research and Development Awards-21, Record Owner-Home of World Records, India	2021
2	CHSN-2020: Young Researcher Award	Andhra Pradesh State Council for Higher Education (APSCHE) and JNTU Kakinada, Andhra Pradesh, India	2020
3	Sir C V Raman Memorial Award-2019	Telangana Citizens Council, Telangana State, India	2019
4	Research day Best paper award, 23 August 2019, CBIT, Hyderabad	Research Day 2019, Chaitanya Bharathi Institute of Technology, Telangana, India	2019
5	Best paper award in International Journal of Advanced Research Trends in Engineering and Technology, UGC Approved Journal, Thomson's Router Indexed.	Thomson's Router	2017
6	M.C. Vaithalingam Best paper National award in the 36 th National Systems Conference, Dec 6-8, 2012, Tamilnadu	Springer Series Lecture Notes in Electrical Engineering	2013

Achievements

1. Letter of appreciation from Convener, TS EAMCET -2020 for successfully discharging duties as **Regional Coordinator** (South East Zone, Hyderabad, Telangana State).
2. Letter of appreciation from Convener, TS EAMCET -2020 for successfully discharging duties as **Member in Confidential Work/Result processing of TS EAMCET-2020.**
3. PI/Instrumental in signing of MoU between Space Applications Center, **ISRO**, Ahmedabad and UCE, OU and (2016-2018) and Extension of MoU (2019 to 2021: Active till September 2021)(Performance Evaluation of Indian NavIC under different conditions)


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4. Instrumental in signing of MoU between OTH University and OU, Amberg, Germany (pending 2021)
(Already signed by Registrar, OU and pending sign from OTH University Germany)

Corporate/Administrative Experience

1. Coordinating Officer(MoU between University College of Engineering, Osmania University and Space Applications Centre, Indian Space Research Organization (ISRO)).(2016 to till date)
2. Vice-President of Osmania University, ECE Alumni Association.
3. Member BOS (Global), Dept of ECE, OU (2014 to till date)
4. **Assistant Controller of Examination** (Coordination, PGCDE, EDP& P-I) (Examination Branch, OU) 2011 to 2016.
5. Member in Dept. Research Committee (**DRC**), Dept of ECE, OU
6. Member in **PhD. Admission Committee**, Dept of ECE, OU
7. Member in **Anti-ragging Committee**, Dept of ECE, OU
8. **Additional Director** (Central Computing Center, UCE,OU).(2011-2015).
9. Worked as **Special Officer**(Central Internet Lab) (2007-2011).
10. Member of **Governing body** for OU affiliated colleges
11. Mmember of Committe for **preparing HandBook** 2012-2013, UCE, OU.
12. Member BOS (Autonomous) in Dept of ECE, UCE, OU (2014 to till date)
13. Member of Committe in Media Coverage in Annual Academic Awards function, UCE,OU
14. Member of the Assessment Committee in **CCMB** and **NRSC**.
15. Member of Telangana State Government Vigilance Committee for Engineering Colleges inspection in 2016.
16. Member of the Assessment Committee (**Andra Pradesh Public Service Comission**).
17. Member of the Assessment Committee to assess (Technical Officers) **CSIR-NGRI**.
18. External expert for conduct of DRTC Special review boards 2011, 2012 & 2013 and assessment board 2013 held at **RCI Defense Research Development Organization, INDIA**.
19. Honorary Membership of OUECE Alumni Association.
20. Member of Governing body for Osmania University affiliated Colleges.
21. **Director (Infrastructure)**, Osmania University, From August, 2021.


Trainings and Other Programs Attended

Workshops Attended:

S.No	Name of the Course	Academic Staff College / University	Duration	Sponsoring Agency
1	A Two day ISRO Webinar on "Continuously"	Webinar	April 21-22. 2021	ISRO Head Quarters, Bengaluru

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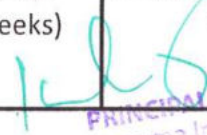
	Operating Reference Station (CORS) in India –prospects on NavIC			
2	A Webinar Series on “Satellite Navigation and NavIC Applications for the Common Man”	Webinar	February 6-9, 2021	Institution Engineers(I), Delhi State Center and Indian Space Industries Exhibitors (ISIE),,, Ahmedabad.
3	National Webinar on “ The Role of Electronics Engineering Fraternity in Craving a Super Techno Power India”	Webinar	26 th July 2020	VSSC, ISRO, Trivendrum
4	International Live Webinar on “ISS-ABOVE: the story of a 6+ adventure bringing space station inspiration to the world”	Webinar	6 th May 2020	Nizam College, Hyderabad
5	Webinar on “Satellite Navigation- past, present and Future”	Webinar	8 th June 2020	ACS college of Engineering, Bengaluru, Karnataka.
6	Five days “Professional Development Program”	IIM Raipur, Chhattisgarh	23-27 th September 2019	TEQIP-III
7	Two Days Workshop on Satellite Navigation & Applications of GNSS/NavIC	National Atmospheric Research Laboratory Department of Space, Govt. of India, Gadanki-517 112, A.P.	5 th -6 th April 2018	National Atmospheric Research Laboratory (NARL) Department of Space, Govt. of India,
8	One day workshop on “Positioning Intelligence”	Hexagon Capability Center India Private Limited, DivyaSree Trinity Campus, Plot No. 5, Phase 2, HITEC City, Hyderabad, Telangana	3 rd October 2018	Hexagon Capability Center India Private Limited,
9				


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	Five Days course on "Opportunities Challenges and Research Trends in Wireless Sensor Networks"	Organized by the Department of ECE, University College of Engineering, Osmania University, Hyderabad-500007. Telangana, India.	11 th -15 th December 2017	Ministry of Human Resource Development (MHRD) Govt. of India under the scheme of (GIAN) Global Initiative for Academic Networks.
10	Five Days course on Theory and Application of Correlation Filters for Computer vision	Organized by the Department of ECE, University College of Engineering, Osmania University, Hyderabad-500007. Telangana, India.	13 th - 17 th November 2017	Ministry of Human Resource Development (MHRD), Govt. of India under the scheme of (GIAN) Global Initiative for Academic Networks.
11	One-week course on Advanced Electromagnetic Engineering	Organized by the Department of ECE, University College of Engineering, Osmania University, Hyderabad-500007. Telangana, India.	02 nd - 08 th November 2017	Ministry of Human Resource Development (MHRD), Govt. of India under the scheme of (GIAN) Global Initiative for Academic Networks.
12	Two Days training on Satellite Navigation	Department of Space Indian Space Research Organization National Remote Sensing Centre, Hyderabad	30 th -31 st October 2017	Indian Space Research Organization, India.
13	Three Days International Conference/Workshop on MARS SUMMIT	ACS College of Engineering	21 st - 23 rd February 2017	ACS College of Engineering, Bengaluru-560 074.
14	One day Workshop on Fundamentals of GNSS/IRNSS and Applications on Atmospheric Science	National Atmospheric Research Laboratory, Department of Space, Govt. of Indian	26 th February 2016	National Atmospheric Research Laboratory, Department of Space, Govt. of Indian
15	Two Days workshop on Communication intelligence	Jointly organized by Department of ECE, CBIT & DLRL, DRDO.	25 th - 26 th October 2016	Defense R & D Organization, DRDO, DLRL

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	(COMINT) Systems			Hyderabad.
16	Two Days Intensive Course on "Electronic Intelligence (ELINT) Systems"	Jointly organized by Department of ECE, Defense Research and Development organization (DRDO) and CBIT.	12 th -13 th December 2014	University College of Engineering, Osmania University.
17	Two Weeks Faculty Development Programme (FDP) in "Entrepreneurship"	Entrepreneur Development Cell, Osmania University	30 th December 2013 – 10 th January 2014	NSTEDB, Department of Science & Technology (DST), Govt. of India.
18	Three Weeks Science & Engineering Research Council (SERC) School on "GPS Applications and Atmospheric Constraints"	SERB and Research and Training Unit for Navigational Electronics, Osmania University	13 th June – 3 rd July 2012	Science and Engineering Research Board (SERC), Department of Science & Technology (DST), Govt. of India.
19	Science and Engg Research Council School (SERC) on "GPS Applications and Atmospheric Constraints"	SERB and Research and Training Unit for Navigational Electronics, Osmania University	13 th June to 3 rd July 2012 (3 Weeks)	Dept. of Science and Technology (DST), Govt. of India
20	Science and Technology initiatives in Atmospheric Science for Engineering Staff.	National Atmospheric Research Laboratory (NARL)	25 th – 26 th November 2010 (2 days)	Dept. of Space, Govt. of India and UGC-SVU Centre for MST Radar Applications, Sri Venkateshwara University, Tirupathi.
21	Science and Engg Research Council School (SERC) on "Atmospheric Effects on GPS and LAAS"	SERB and Research and Training Unit for Navigational Electronics, Osmania University	17 th June to 7 th July 2009 (3 Weeks)	Dept. of Science and Technology (DST), Govt. of India


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22	High Impact Presentation Skills	Wipro Technologies and University College of Engineering, Osmania University	11 th Feb to 15 th Feb 2008 (1 Week)	WIPRO Technologies and UCE, OU
23	Science and Engg Research Council School (SERC) on "Atmospheric Effects on GAGAN"	SERB and Research and Training Unit for Navigational Electronics, Osmania University	14 th Nov to 4 th Dec 2007 (3 Weeks)	Dept. of Science and Technology (DST), Govt. of India
24	Faculty Orientation Program	Osmania University Center for International Programs	2 nd July to 12 th July 2007 (2 Weeks)	Osmania University Center for International Programs

Memberships in Professional/Scientific Bodies

S.No.	Details
1	Member of Institute of Electrical and Electronics Engineers (M.No. 91140906)
2	Member of "International Association of Computer Science and Information Technology" (IACSIT), Singapore (M.No: 80332542).
3	Life Member of Instrumentation Society of India (ISOI), India (LM 1785)
4	Life Member of Indian Society for Technical Education (ISTE) India (LM 28535).
5	Life Member of <i>Broadcast Engineering Society</i> (BES), India
6	Life Member of Institution of Engineers (MIE)
7	Life Member of Indian National Cartographic Association (ICA)
8	Member of IEEE, USA

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List of Publications

Peer-Reviewed Papers

International Journals:

1. Devireddy K, Narsetty S, Ramavath AK, **Perumalla NK.**, "Validation of the IRI-2016 Model with Indian NavIC data for Future Navigation Applications", ET Radar Sonar Navig. volume 1, Issue 15, pp. 37-50, 2021.. <https://doi.org/10.1049/rsn2.12013> (**Expanded SCI Journal**)
2. Kavitha Devireddy, Noor Ul Abedin, Devadas Kuna and **Dr. P. Naveen Kumar**, "Analysis of Various Parameters of L5 and S1 NavIC Signals over Low Latitude Region", **Elsevier Journal of Procedia Computer Science**, Volume 171, pp. 2704–2712, 2020. <https://doi.org/10.1016/j.procs.2020.04.293>.
3. Kavitha D., **Naveen Kumar P.**, Praveena K., "Comparison of VTEC Due to IRI-2016 Model and IRNSS over Low Latitude Region", **Springer Nature Switzerland AG** 2020, Learning and Analytics in Intelligent Systems, Volume 4, Spp. 320–326, 2020. https://doi.org/10.1007/978-3-030-24318-0_39.
4. **Dr P Naveen Kumar**, D Kavitha, "GNSS Ionospheric Scintillation Monitoring Using GPStation-6 at Low Latitude Ground Station" International Journal of Electronics, Electrical and Computational System (IJEECS), ISSN 2348-117X Volume 6, Issue 8 August 2017. (**UGC Listed DOAJ, EBSCOHOST, MENDELEY**)
5. Kaitha Praveena, **Perumalla Naveen Kumar**, D. Krishna Reddy, N. Santhosh "Analysis of Ionospheric Scintillations of NavIC L5 and S band Signals over Low Latitude Indian Region", **Elsevier Journal of Procedia Computer Science**, Volume 171, 2020, pages 989-998. <https://doi.org/10.1016/j.procs.2020.04.106>
6. Devadas Kuna, N. Santhosh, **Naveen Kumar Perumalla**, "Preliminary Analysis of Standalone Galileo and NavIC in the context of Positioning Performance for Low Latitude Region", **Elsevier Journal of Procedia Computer Science**, Volume 171, 2020.
7. K Madhu Krishna, **P Naveen Kumar**, R Naraiah, "Prediction of Differential GPS Corrections Using AR and ARMA Models", **Springer Nature Switzerland AG**, ICETE 2019, LAIS 4, pp. 290–298, 2020. <https://link.springer.com/chapter/10.1007%2F978-3-030-24318-035>
8. K. Devdas, **P. Naveen Kumar**, R. Anil Kumar "Positioning parameters for stand-alone and Hybrid modes of the Indian NavIC System: Preliminary Analysis", **Springer**, International Conference on Emerging Trends in Engineering, during 22-23 March 2019, University College of Engineering, Osmania University, Hyderabad, Telangana, India.
9. **P Naveen Kumar**, Pedda Naraiah, "Analysis of Selected Parameters of Single Frequency Receiver in GPS and GAGAN modes" International Journal of Advanced Research Trends in Engineering and Technology (IJARTET), ISSN 2394-3785, Volume 4, Issue 12 (Dec-2017), Page No.11-14. (**Best Research Paper award**), (**UGC Approved Journal, Thomson's Router Indexed**).
10. **P Naveen Kumar**, Pedda Naraiah, "Comparative Analysis of Accuracy of Distance Measured using GPS and Indian SBAS for Single Frequency Applications" International Journal of Emerging Technology and Advanced Engineering (IJETAEE), SSN 2250 – 2459 Volume 7, Issue 11, Published in November 2017, Page No:409-412. (**UGC Approved**).
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