


Name of the Faculty	Dr. A. Supraja Reddy		
Designation	Associate Professor		
Nature of Job/Appointment	Regular		
Date of Joining the institution	27.02.2015 (Contract) 04.07.2019 (Regular)		
Email	suprajareddy_ece@cbit.ac.in		
Educational Qualifications	Name of the Degree	Class	
	Ph. D	Doctor of Philosophy (ECE)	Awarded
	PG	M. Tech (RS&GIS)	First with Distinction
	UG	B. E. (ECE)	First with Distinction
Work Experience			
	Teaching	15 Years	
	Research	03 years	
	Industry	--	
	Others	--	
Area of Specialization	Global Navigation Satellite Systems (GNSS), GNSS Augmentation Systems, Ionospheric Wave Propagation		
Professional Memberships	FIETE		
Responsibilities held at Institution Level	<ol style="list-style-type: none"> 1. Member, Academic Council 2. Member, Academic Audit Committee 3. Member, Industry Institute Cell 		
Responsibilities held at Department Level	<ol style="list-style-type: none"> 1. Member, BoS, ECE Dept. 2. Incharge, Academic Audit 3. Dept. Research Coordinator 4. Convener, Dept. Research Committee 5. Member, Program Content Committee 6. Chairman, Course Expert Group 		
Research Guidance	Guided 07 M.E projects		
Awards Received	<ol style="list-style-type: none"> 1. Received 'best paper of the conference' and the 'best paper of the track - antennas and wireless communication' awards for the paper entitled "Effect of Latitude and Longitude on Bounding Sigma at Low-latitude Stations for GBAS Applications" at IEEE International WIE Conference on Electrical and Computer Engineering 2016 (WIECON-ECE) is jointly organized by IEEE Pune section and IEEE Bangladesh section. 2. Received 'best paper of the conference' award for the paper entitled "Multipath and Thermal Noise Free relative TEC estimation using IRNSS L5 and S1 signals" at <i>International Conference on Innovative Technologies in Engineering (ICITE 2018)</i>, Osmania University, Hyderabad, 11-13 April 2018. 		
Courses Handled at Under Graduate / Post Graduate Level.	Electronic Devices, Analog Circuits, Satellite Communications, Principles of GNSS, Wireless and Mobile Communication, Signal Intelligence Systems		
No. of Papers Published	National Journals --	International Journals – 15	
Projects Carried out	National Conference – 09	International Conference – 19	
Patents	--		
Technology Transfer	--		
Invited Speaker	<ol style="list-style-type: none"> 1. Lecture on "DGPS for Marine Navigation" in AICTE Sponsored STTP on "Current Trends and Emerging Advances in Marine Navigation and Communication" (Phase-I), 23-28 Nov 2020. 2. Lecture on "GBAS for Sea Ports" in AICTE Sponsored STTP on "Current Trends and Emerging Advances in Marine Navigation and Communication (Phase-II), 07-12 Dec 2020. 3. Lecture on "Latest trends and developments in GBAS", at University College of Engineering, Osmania University, 		

- Hyderabad during a STTP on “Recent Research Developments and Challenges in Communication and Navigation Technologies”, during 25-29 Feb 2020.
4. Lecture on ‘Ongoing Research in the Area of Ground Based Augmentation Systems’ at Research and Training Unit for Navigational Electronics (NERTU), Osmania University, Hyderabad, during a Two day symposium on ‘Research Trends in GNSS’ during September 08-09, 2019
 5. Lecture on ‘Ground Based Augmentation Systems for Improved Position Accuracy’ at Geethanjali College of Engineering and Technology (GCET), Medchal Dist., during a One week FDP on ‘5G and GNSS Positioning’ during June 17-22, 2019
 6. Lecture on “GNSS Augmentation Systems”, at University College of Engineering, Osmania University, Hyderabad during a One Week FDP on “Principles of GNSS, Applications and Research Areas” on 08 June 2018.

No. of Books/Chapter Published with details

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Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops/Other Trainings (**Attended and/or Organized**).

1. One Week STTP on “Emerging Trends in VLSI Technology”, organized by Malla Reddy Engineering College for Women, 14-19 June.
2. ATAL FDP on “Design Thinking”, organized by Bharati Vidyapeeth College of Engineering and ATAL Academy, 21-25 June 2021.
3. Webinar series on “Applications of Satellite Navigation and NavIC for Common Man”, , 06-09 Feb 2021, organized by Indian Space Industries Exhibitors.
4. One week online refresher course BHARATEEYA CHAITANYAM organized by Geervana Bharathi of Chaitanya Samskruthi, CBIT , during 29 June to 05 July 2020.
5. “Introduction to Electronics” an online non-credit course authorized by Georgia Institute of Technology and offered through Coursera on 10 June 2020
6. One week FDP on “Outcome Based Education and NBA Accreditation Process (UG) conducted by CBIT during 28 May to 01 June 2020
7. “AI for everyone” an online non-credit course authorized by Stanford University and offered through Coursera on 04 May 2020
8. “Wireless Communication for Everybody” an online non-credit course authorized by Yonsei University and offered through Coursera on 28 April 2020
9. Participated in IIC online sessions conducted by Institute’s Innovation Cell of MHRD Innovation Cell during 28 April to 22 May 2020.
10. One week FDP on “IoT for Emerging Applications”, organized by CBIT during 04-08 Feb 2020.
11. Workshop on “Quantum Computing”, organised by Quantum Computing Special Interest Group, IEEE Hyderabad Computer Society Chapter, on 16th Nov 2019, Supported by Microsoft and IIT Hyderabad.
12. National Workshop on Wireless Communication (NWWC-2019)’, organized by Advanced Institute of Mathematics, Statistics and Computer Science (AIMSCS), Hyderabad, during 21st – 23rd Jan 2019.
13. Organizer, Research Day, at CBIT on 23rd August 2019.
14. Coordinator of 4th International Conference on Vedic Mathematics, organized by CBIT in association with IAVM during 29- 31 Aug 2019.

Details of Journal Publications/ Conferences

(National and International)

International Journals

1. Ammana, S.R., Sujimol, M.R., Songala, K.K, Sarma A.D "Advantage of IRNSS S-band signal for GBAS applications in adverse ionospheric storm conditions". Aerospace Systems, 5(3), (2022). <https://doi.org/10.1007/s42401-022-00158-6>.
2. Supraja R Ammana and Haritha G, “ Analysis of Temporal Variations of TEC with Ionospheric Activity at Low Latitude Station” , Proteus Journal, June 2021.
3. S R Ammana, “An Analysis of GPS Code minus Carrier (CMC) Measurements for GBAS Applications”, The IUP Journal of Electrical and Electronics Engineering, Vol.11(1), (pp.7-13) January 2018.
4. A.S Reddy, “Ionospheric Effects on the Performance of Satellite-Based Navigation in India”, Research Journal of

- Engineering and Technology, Vol. 09 (1), Jan-Mar 2018, (pp.55-58).
5. Supraja Reddy Ammana and Sarma D Achanta, "Estimation of Overbound on Ionospheric Spatial Decorrelation over Low Latitude Region for GBAS", IET Radar Sonar and Navigation, Vol.10(3), pp.637-645, March 2016. (10.1049/iet-rsn.2015.0469)
- International Conference Papers
6. Supraja Reddy Ammana, Satyanarayana K, Bhaskara S. M, Komal Kumar S, Sowjanya B, Namitha K, Nikhitha T, Sarma A. D, "Development of Simple Software Receiver For IRNSS L5 Signal", 2021 IEEE International Women in Engineering (WIE) conference on Electrical and Computer Engineering (WIECON-ECE), 4-5 December 2021, Dhaka, Bangladesh.
 7. Bhaskara S. M, Sarma A.D, Komal Kumar S, Supraja Reddy A, "A Simple SDR based Method to Spoof Low-End GPS aided Drones for Securing Locations", 2021 IEEE International Conference on Robotics, Automation, Artificial-Intelligence and Internet-of-Things (RAAICON), 3-4 Dec 2021, Dhaka, Bangladesh (accepted, yet to be published).
 8. Sree Naresh Krishna Chama, Satyanarayana Katukojwala, Supraja Reddy Ammana, Shivank Agarwal, Varun Kumar Reddy and A.D.Sarma "Design and Development of NavIC and GPS based Geolocation System for CO2 Monitoring", International Conference on Innovative Practices in Technology and Management.. 17-19 Feb 2021, Amity University, Noida.
 9. Komal Kumar S, Supraja Reddy A, Harichandana R., and A.D.Sarma "Simplistic Spoofing of GPS Enabled Smart Phone" 2020 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE), 26-27 December, 2020, Bhubaneswar, India.
 10. Naga, S.R.C., Padmapriya, K., Supraja, R.A., Satyanarayana, K. and Dattatreya, S.A., 'Design and Implementation of Bluetooth-Beacon based Indoor Positioning System', 5th IEEE international Women in Engineering (WIE) Conference on Electrical and Computer Engineering 2019 (IEEE WIECON-ECE 2019), IEEE Bangalore Section & WIE AG Bangalore Section, 15-16 Nov. 2019 (10.1109/WIECON-ECE48653.2019.9019997).
 11. Supraja Reddy Ammana and A.D. Sarma, 'On the Suitability of Ionospheric Gradient Estimation Techniques for IRNSS based GBAS Applications', IEEE international Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting, Boston, Massachusetts, USA, 8-13 July 2018.
 12. Supraja Reddy A, "Performance Evaluation of Mixed-Pair method of Estimation of Ionospheric Gradients on IRNSS L5 Signals", International Conference on Innovative Technologies in Engineering (ICITE 2018), Osmania University, Hyderabad, 11-13 April 2018.
 13. Mohd Qurram Javeed, A.D. Sarma, A. Supraja Reddy, T. Sridher, N.V. Koteswara Rao and Tarun Kumar Pant "Multipath and Thermal Noise Free relative TEC estimation using IRNSS L5 and S1 signals", International Conference on Innovative Technologies in Engineering (ICITE 2018), Osmania University, Hyderabad, 11-13 April 2018.
 14. Supraja Reddy A, "Investigation of Anomalous Ionospheric Gradient Effects on the Performance of Indian GBAS", IEEE International Conference on Computing Methodologies and Communication (ICCMC-2017), Surya Engineering College, Erode, 18-19 July 2017.
