

Name of Faculty Dr. G.V. Pradeep Kumar  
 Designation Assistant Professor  
 Nature of Job/Appointment Regular  
 Date of Joining 03-12-2007  
 E-mail pradeepkumar\_ece@cbit.ac.in



Education Qualifications	Name of the Degree	Class
Ph. D	Doctor of Philosophy (ECE)	Awarded
PG	M. E. (Communication Engineering)	Distinction
UG	B. Tech. (ECE)	Second

**Work Experience**

Teaching	16 Years
Research	--
Industry	--
Others	--
Area of Specialization	Computer Networks, Security in Wireless Networks
Professional Memberships	Fellow IETE (F-502560) & Life Member ISTE (LM 133159)
Responsibilities held at Institution Level	<ol style="list-style-type: none"> <li>Co-incharge, Academics and Examination Cell.</li> <li>Member, Course Expert Group.</li> <li>Member, BoS.</li> </ol>
Responsibilities held at Department Level	<ol style="list-style-type: none"> <li>In-charge, CCN Lab.</li> <li>Member, Program Content Committee.</li> <li>Incharge, Wi-Fi and Internet.</li> <li>Member, Alumni activities.</li> <li>Member, Innovation &amp; Incubation activities.</li> <li>Coordinator, NAAC, ARIIA, NIRF.</li> </ol>
Research Guidance	--
Awards Received	--
Courses Handled at Under Graduate / Post Graduate Level.	Data Communication and Computer Networking, Speech Processing, Advanced Communication Networks, Embedded System Design, Optical Fiber Communications, Modern Digital Communication Systems, Basic Electronics, Wireless Mobile Communication Systems, Global Positioning System and Augmented Systems.
No. of Papers Published	National Journals – 00 International Journals – 11 National Conference – 00 International Conference – 06
Projects Carried out	--
Patents	--
Technology Transfer	--
Invited Speaker	1. Resource person in One-week Virtual FDP on "Contemporary Techniques in Electronics and Communication Engineering", for delivering a lecture on "Performance Analysis of Defense Mechanism based on Threat and Attack model in Wireless Networks for Improving QoS", 22 <sup>nd</sup> June 2022, Sree Rama Engineering College, Tirupati, Andhra Pradesh.
No. of Books/Chapter Published with details	--
Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops.	1. Coordinated One-week Online FDP on "Research Opportunities in Image Processing and Machine Learning", during 29 <sup>th</sup> June to 3 <sup>rd</sup> July 2020.
Other Trainings (Attended and/or Organized).	2. Department Coordinator for "SYNAPSE-2018", under SUDHEE- 2018 during 28 <sup>th</sup> and 29 <sup>th</sup> September 2018.

3. Organized a Two-week Internship Program on “Hands-on LabVIEW”, during 18<sup>th</sup> June to 30<sup>th</sup> June 2018.
4. Successfully Completed a UGC Sponsored Three-Week Refresher Course on “Internet of Things”, Organized by JNTU Hyderabad, during 03<sup>rd</sup>-22<sup>nd</sup> December 2018.
5. Participated in 97<sup>th</sup> Orientation Course organized by H.R.D.C (UGC-Academic Staff College), University of Hyderabad, Hyderabad, Telangana from 23<sup>rd</sup> November to 20<sup>th</sup> December 2016.
6. Successfully completed One Week online Faculty Development Program on " Multidisciplinary aspects of Low Power Wireless Sensor Networks", organized by Annant Gyan Knowledge and Skills Pvt. Ltd., during 24<sup>th</sup> July – 29<sup>th</sup> July 2023.
7. Successfully completed One Week online Faculty Development Program on "Performance Analysis of Wireless Communication System", organized by Annant Gyan Knowledge and Skills Pvt. Ltd., during 26<sup>th</sup> June - 01<sup>st</sup> July 2023.
8. Successfully completed the online workshop entitled "SAFE Tools for Effective Online Teaching, A Hand-on Workshop", involving 3 days of video lectures and hands-on work, organized by IIT Bombay, on 20<sup>th</sup> June 2020.
9. Successfully completed the online workshop entitled "Effective and Efficient Online Teaching in the Age of Corona, A Hands-on Workshop", involving 3 days of video lectures and hands-on work, organized by IIT Bombay, on 17<sup>th</sup> May 2020.
10. Successfully Completed AICTE Sponsored AQIS STTP on “Design and Structural Evolution of Advanced Functional Materials Suitable for Engineering Applications”, offered by VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad from 01<sup>st</sup> – 06<sup>th</sup> March 2021.
11. Successfully Completed AICTE Sponsored AQIS STTP on “Design and Structural Evolution of Advanced Functional Materials Suitable for Engineering Applications”, offered by VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad from 15<sup>th</sup> -20<sup>th</sup> February 2021.
12. Successfully Completed AICTE Sponsored One Week Online STTP (Phase-II) on “Current Trends and Emerging Advances in Marine Navigation and Communication”, offered by CBIT(A), Hyderabad from 07<sup>th</sup> -12<sup>th</sup> December 2020.
13. Successfully Completed AICTE Sponsored One Week Online STTP (Phase-II) on “Recent Emerging Trends in Wireless Communication using IoT”, offered by Vidya Jyothi Institute of Technology (Autonomous) in association with AICTE from 07<sup>th</sup> -12<sup>th</sup> December 2020.
14. Successfully completed the online 5-days Short Term Training Program on “Recent Trends in Data Science and Information Security”, organized by Ramrao Adik Institute of Technology, Nerul, Navi Mumbai, during 22<sup>nd</sup>-26<sup>th</sup> June 2020.
15. Successfully completed the online 5-days Short Term Training Program on “Internet of Things (IoT) & It's Applications in Industry”, organized by Ramrao Adik Institute of Technology, Nerul, Navi Mumbai, during 8<sup>th</sup>-12<sup>nd</sup> June 2020.
16. Successfully completed the online 5-days Short Term Training Program on “MATLAB based Teaching-Learning in Mathematics, Science & Engineering”, organized by Ramrao Adik Institute of Technology, Navi Mumbai, during 18<sup>th</sup>-22<sup>nd</sup> May 2020.
17. Successfully Completed an AICTE Sponsored One-week Short Term Training Program on “Challenges and Research Avenues in Signal and Image Processing”, organized by Sree Vidyanikethan Engineering College, Tirupati, during 11<sup>th</sup> – 16<sup>th</sup> November 2019.
18. Successfully Completed AICTE Sponsored Two Week FDP (Phase-I, Online) on “Hands on Project-Based Approach for

Biomedical Signal Analysis using MATLAB”, offered by Kakatiya Institute of Technology & Science, Warangal from 28-12-2020 to 10-01-2021.

19. Successfully completed One Week National Level Online Faculty Development Program on "Cyber Security", jointly organized by Chaitanya Bharathi Institute of Technology (A), Hyderabad and Mahatma Gandhi Institute of Technology, Hyderabad, in association with Supraja Technologies during 07<sup>th</sup>-12<sup>th</sup> July, 2020.
20. Successfully completed One Week Faculty Development Program on "Future Nano Electronic Devices & Circuits", organized by Mahatma Gandhi Institute of Technology, Hyderabad, during 06<sup>th</sup>-10<sup>th</sup> July, 2020.
21. Successfully Completed One Week Online FDP on “Ethical Hacking and Data Security”, offered by MGIT, Hyderabad in association with Pristine Info solutions from 27<sup>th</sup> -31<sup>st</sup> June 2020.
22. Successfully completed One Week Faculty Development Program on "Entrepreneurship, Incubation and Innovation", organized by Ramanujan College, University of Delhi, during 23<sup>rd</sup>-29<sup>th</sup> June, 2020.
23. Successfully completed One Week Faculty Development Program on "Open Source Tools for Research", organized by Ramanujan College, University of Delhi, during 08<sup>th</sup> -14<sup>th</sup> June, 2020.
24. Successfully completed One Week Faculty Development Program on "Outcome Based Education-NBA Accreditation Process-(UG)", organized by CBIT (A), Hyderabad, during 28<sup>th</sup> May to 01<sup>st</sup> June, 2020.
25. Successfully Completed a One Week Faculty Development Program on "IoT for Emerging Applications", Jointly Organized by Electronics & ICT Academy IIT Guwahati, Assam and CBIT(A) during 04<sup>th</sup> -8<sup>th</sup> February 2020.
26. Successfully Completed a MeitY, Govt. of India Sponsored Faculty Development Program on “Advances in Practical RF Antenna Design”, organized by E&ICT Academy, NIT Warangal at Sree Vidyanikethan Engineering College, Tirupati, during 25<sup>th</sup> – 30<sup>th</sup> November 2019.
27. Participated in Three-day Faculty Development Program on “Three-day Faculty Development Program”, organized by CBIT, Hyderabad, during 17<sup>th</sup> – 19<sup>th</sup> December 2008.
28. Successfully Completed “Introduction and Programming with IoT Boards” a 5-Week online non-credit course authorized by Pohang University of Science and Technology and offered through Coursera on 13-06-2020.
29. Successfully Completed “Number Theory and Cryptography”, a 4-Week online non-credit course authorized by University of California San Diego and offered through Coursera on 07-06- 2020.
30. Successfully Completed “Cybersecurity and the Internet of Things”, a 4-Week online non-credit course authorized by Kennesaw State University and offered through Coursera on 06- 06-2020.
31. Successfully Completed “Building Arduino Robots and Devices”, a 6-Week online non-credit course authorized by Moscow Institute of Physics and Technology and offered through Coursera on 06- 06-2020.
32. Successfully Completed “Exploratory Data Analysis with MATLAB”, a 5-Week online non-credit course authorized by MathWorks and offered through Coursera on 23-05-2020.
33. Successfully Completed “COVID-19: What You Need to Know (CME Eligible)”, a 1-Week online non-credit course authorized by Osmosis.org and offered through Coursera on 22-05-2020.
34. Successfully Completed “Internet History, Technology, and Security”, a 10-Week online non-credit course authorized by University of Michigan and offered through Coursera on 15-05- 2020.
35. Successfully Completed “Introduction to Electronics”, a 7-Week online non-credit course authorized by Georgia



Institute of Technology and offered through Coursera on 15-05-2020.

36. Successfully Completed "Introduction to TCP/IP", a 5-Week online non-credit course authorized by Yonsei University and offered through Coursera on 14-05-2020
37. Successfully Completed "The Bits and Bytes of Computer Networking" a 6-Week online non-credit course authorized by Google and offered through Coursera on 12-05-2020.
38. Successfully Completed "TCP/IP and Advanced Topics", a 5- Week online non-credit course authorized by University of Colorado and offered through Coursera on 12-05-2020.
39. Successfully Completed "Peer-to-Peer Protocols and Local Area Networks", a 5-Week online non-credit course authorized by University of Colorado, offered through Coursera on 12-05- 2020.
40. Successfully Completed "Packet Switching Networks and Algorithms", a 5-Week online non-credit course authorized by University of Colorado and offered through Coursera on 11-05- 2020.
41. Successfully Completed "Fundamentals of Network Communications", a 5-Week online non-credit course authorized by University of Colorado and offered through Coursera on 11-05- 2020.
42. Successfully Completed "Introduction to Satellite Communications", a 6-Week online non-credit course authorized by Institut Mines- Télécom and offered through Coursera on 10- 05-2020.
43. Successfully Completed "Interfacing with the Raspberry Pi", a 4- Week online non-credit course authorized by University of California, Irvine and offered through Coursera on 09-05-2020.
44. Successfully Completed "Wireless Communications for Everybody", a 6-Week online non-credit course authorized by Yonsei University and offered through Coursera on 08-05-2020.
45. Successfully Completed "Introduction to the Internet of Things and Embedded Systems", a 4-Week online non-credit course authorized by University of California, Irvine and offered through Coursera on 07-05-2020.
46. Successfully Completed "Interfacing with the Arduino", a 4-Week online non-credit course authorized by University of California, Irvine and offered through Coursera on 05-05-2020.
47. Successfully Completed "Machine Learning for All", a 4-Week online non-credit course authorized by University of London and offered through Coursera on 03-05-2020.
48. Successfully Completed "Programming for Everybody (Getting Started with Python)", a 7-Week online non-credit course authorized by University of Michigan and offered through Coursera on 03-05-2020.
49. Successfully Completed "AI for Everyone", a 4-Week online non- credit course authorized by Deeplearning.ai and offered through Coursera on 30-04-2020.
50. Successfully Completed "Introduction to Programming with MATLAB", a 9-Week online non-credit course authorized by Vanderbilt University and offered through Coursera on 24-04- 2020.
51. Successfully Completed "Classical Cryptosystems and Core Concepts", a 3-Week online non-credit course authorized by University of Colorado and offered through Coursera on 24-04- 2020.
52. Participated in the IIC Online Sessions conducted by Institution's Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi to promote Innovation, IPR, Entrepreneurship, and Start-ups among HEIs from 28<sup>th</sup> April to 22<sup>nd</sup> May 2020.
53. Successfully Completed an online course on "NAAC Awareness Programme for Faculty", offered by Marathwada Mitra Mandal Institute of Technology (MMIT), Lohgaon, Pune, during 8<sup>th</sup> -14<sup>th</sup> May 2020.
54. Successfully Completed an online training course on "Deep Learning Onramp", offered by MathWorks, on 13-05-2020.

55. Successfully Completed an online training course on "Machine Learning Onramp", offered by MathWorks, on 13-05-2020.
56. Successfully Completed an online training course on "MATLAB Onramp", offered by MathWorks, on 05-05-2020.
57. Successfully Completed a Two-Week Course on "Digital Transformation in Teaching Learning Process", a TEQIP Online Certification, Funded by the Ministry of HRD, Govt. of India during 14th February to 6<sup>th</sup> March 2020
58. Successfully completed a 12-Week NPTEL course "NBA Accreditation and Teaching - Learning in Engineering (NATE)", on the SWAYAM platform (swayam.gov.in), during the Jan-Apr 2020 semester.
59. Successfully Completed all the requirements for the grant of title of "Certified LabVIEW Associate Developer", issued by National Instruments, valid from 24-08-2017 to 23-08-2019.
60. Attended "Training for Hands on LabVIEW Core 1 and 2", organized by the Department of ECE, CBIT, Hyderabad during November 07<sup>th</sup> & 08<sup>th</sup> 2016 and December 20<sup>th</sup> - 24<sup>th</sup> 2016.

Details of Journal Publications/  
Conferences (National and  
International)

**International Conferences:**

1. V V Satyanarayana Tallapragada, Kullayamma, **G.V.Pradeep Kumar**, M. Venkatanaresh, "Significance of Internet of Things (IoT) in Health Care with Trending Smart Application", in Smart Systems: Innovations in Computing (pp. 237- 245). Springer, Singapore, 2022, DOI: [https://doi.org/10.1007/978-981-16-2877-1\\_22](https://doi.org/10.1007/978-981-16-2877-1_22).
2. V V Satyanarayana Tallapragada, M V Nagabhushanam, **G.V.Pradeep Kumar**, "Turbo Code with Hybrid Interleaver in the presence of Impulsive Noise", International Conference on Innovative Computing and Communication (ICICC-2020), Springer, 21<sup>st</sup> – 23<sup>rd</sup> February 2020. DOI: <https://doi.org/100.58482/ijeresm.v1i1.5>
3. T V V Satyanarayana, **G.V.Pradeep Kumar**, J.K Sunkara "Wavelet Packet: A Multirate Adaptive Filter for Denoising of TDM Signal", IEEE International Conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing (EECCMC-2018) during 28<sup>th</sup> – 29<sup>th</sup> January, 2018, organized by Priyadarshini Engineering College, Vellore, Tamilnadu.
4. K.Karthik Sri Sainath, N.V. Koteswara Rao, **G.V.Pradeep Kumar**, "A Secure Routing Algorithm for Detecting and Preventing Sinkhole Attack in MANETS", IEEE International Conference on Science, Technology, Engineering and Management (ICSTEM'17), Coimbatore, March 2017, pp. 1-6.
5. **G. V. Pradeep Kumar** and D. Krishna Reddy, "Frequency domain techniques for void spectrum detection in cognitive radio network for emulation attack prevention," 2016 International Conference on Circuit, Power and Computing Technologies (ICCPCT), Nagercoil, India, 2016. DOI: <https://doi.org/10.1109/ICCPCT.2016.7530134>.
6. **G. V. Pradeep Kumar** and D. Krishna Reddy, "An Agent Based Intrusion Detection System for Wireless Network with Artificial Immune System (AIS) and Negative Clone Selection", 2014 International Conference on Electronic Systems, Signal Processing and Computing Technologies, Nagpur, India, 2014, pp. 429-433, DOI: <https://doi.org/10.1109/ICESC.2014.73>.

**International Journals:**

1. V.V. Satyanarayana Tallapragada, N. Alivelu Manga, **G.V. Pradeep Kumar**, "A novel COVID diagnosis and feature extraction based on discrete wavelet model and classification using X-ray and CT images", Multimedia Tools and Applications, Springer, January 2023, DOI: <https://doi.org/10.1007/s11042-023-14367-4>.
2. N. Alivelu Manga, **G.V. Pradeep Kumar** & V.V. Satyanarayana Tallapragada, "FPGA design of arithmetic optimized APT-VDF using reusable Vedic multiplier with simplified combinational logics for medical signal denoising", International Journal of Electronics, Taylor & Francis, ISSN: 0020-7217, November 2022, DOI: <https://doi.org/10.1080/00207217.2022.2148003>.
3. **G.V.Pradeep Kumar**, D.Krishna Reddy, "Hierarchical Cat and Mouse based ensemble extreme learning machine for spectrum sensing data falsification attack detection in cognitive radio network", Microprocessors and Microsystems Journal (Elsevier) , DOI: 10.1016/j.micro.2022.104523, April 2022, pp.1-15.

4. **G.V.Pradeep Kumar**, D.Krishna Reddy, "Revelation and Defense against Overlapping Secondary User Attack using H Infinity Filter in the Cognitive Radio Network", Design Engineering (Toronto), Issue 7; pp. 8099-8114, August 2021.
5. N. Alivelu Manga, V.V. Satyanarayana Tallapragada, **G.V. Pradeep Kumar**, R. Sai Prasad Goud, "Design of High-Speed Low Power Computational Blocks for DSP", Revista Geintec-Gestao Inovacao e Tecnologias, Vol. 11 No. 2, June 2021, ISSN: 2237-0722, pp. 1419-1429.
6. V V Satyanarayana Tallapragada, **G V Pradeep Kumar**, D Venkat Reddy, K L Narasimha Prasad, "Image Denoising Using Low Rank Matrix Approximation in Singular Value Decomposition", Revista Geintec-Gestao Inovacao e Tecnologias, Vol. 11 No. 2, June 2021, ISSN: 2237-0722, pp. 1430-1446.
7. V V Satyanarayana Tallapragada, N Alivelu Manga, **G.V. Pradeep Kumar**, M Venkata Naresh, "Mixed image denoising using weighted coding and non-local similarity", SN Applied Sciences-Springer, Volume 2, Issue 6, May 2020, DOI: <https://doi.org/10.1007/s42452-020-2816-y>.
8. **G.V.Pradeep Kumar** V. V. Satyanarayana Tallapragada, V. Sireesha, "Telugu Character Recognition Using Adaptive Fuzzy Membership Functions with Adaptive Genetic Algorithm Based Techniques", International Journal of Recent Technology and Engineering (IJRTE), Volume 8, Issue 3, September 2019, pp. 3092-3097, DOI: <https://doi.org/10.35940/ijrte.C4973.098319>.
9. M.Venkata Naresh, V. V. Satyanarayana Tallapragada, **G. V. Pradeep Kumar**, "Segmentation of Medical Images with Intensity Inhomogeneity using Multiphase Level Set Functions", International Journal of Engineering & Technology, Vol. 7, No.3.20, 2018, pp. 683-689. DOI: <https://doi.org/10.14419/ijet.v7i3.20.22971>.
10. **G.V.Pradeep Kumar**, D. Krishna Reddy, "A machine learning framework of neural network combined with PLS regression and artificial immune system for intrusion detection", International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE)-Volume 3, Issue 12, December 2014, ISSN: 2278-1021 (Online), ISSN: 2319-5940 (Print), DOI: <https://doi.org/10.17148/IJARCCE.2014.31226>.
11. **G.V.Pradeep Kumar**, "A Unique Huffman Coding Based Multipath Data Security Standard using Data Compression Technique for Multi hop Network", International Journal of Electronics & Communication & Technology (IJECT)-Volume 3, Issue 2, April-June 2012, ISSN: 2230-7109 (Online), ISSN: 2230-9543 (Print).

