


Faculty Profile

Name of Faculty	Dr.Santosh Devidaspant Chede	
Designation :	Principal	
Qualification :	Ph.D. (Electronics and communication) “Low power design aspects of Embedded system: A case study of Implantable Pacemaker”.V.N.I.T.,Nagpur Awarded on 30th March 2010	
Specialization :	Electronics and Telecommunication	
Official Email ID: principal.dypcet@dypgroup.edu.in		
Memberships	<ul style="list-style-type: none">• 6. Life member of Indian Society for Technical Education (ISTE), LM15012.• 7. Fellow Institute of Electronics and telecommunication Engineers (IETE), F-502011.• 8. Fellow Institution of Engineers (India),F-1280976.	
Courses Taught	<ul style="list-style-type: none">• For UG course: (B.E., Electronics and telecommunication) : Instrumentation, Instrumentation and Drives, Mechanical Measurements, Biomedical Engineering, Electronics Devices and Circuits, Digital Integrated Circuits, Power Electronics, Industrial Electronics, Electronics Instrumentation and Process Control, Industrial Automation and Control,Network analysis, Microprocessor and Microcontroller Applications,Linear Electronics Circuits, Electronics SystemDesign,Industrial Automation• For PG course: (M.E. Digital Electronics/Communication): Digital Instrumentation and Control, Digital Instrumentation, Embedded system, VLSI signal processing, Reconfigurable computing,Research Methodology <p>PhD Awarded (05)</p> <ol style="list-style-type: none">1. Design , development and analysis of Low power telemedicine system : V.G. Girhepunje: Dec.2016.2. Development of and algorithm for designing a low power low cost embedded system for biomedical application : Nitin Ambatkar: Dec.-2016.3. Design and Implementation of effective AM-FM demodulation and imagereconstruction techniques in Biomedical application : Surekha Washimkar:	

	<p>Nov.2019.</p> <p>4. Analysis comparison and development of advanced protocol for energy efficient wireless sensor network : Jaya Bhattad : Nov.2019.</p> <p>5. Design and analysis of low power techniques for its implementation on Network on Chip (NOC) : Mohammed WaseemKhanooni : Oct.2021</p> <p>Registered Research Scholar : 06 : SUK University, Kolhapur</p>
Roles and Responsibilities	<ul style="list-style-type: none"> • Program Coordinator • Chairman BOS,(Electrical Engg.), R.T.M.NagpurUniversity, Nagpur. • H.O.D. (Department of Electronics and Telecommunication),PCE, Nagpur. • Project Director, ParamEngineersAcademyand Research Lab. (PEARL), OMCOE , Wardha. • Project Coordinator, Texas Instruments Lab., OMCOE, Wardha. • Editorial Board Member,International Journal for Electro-computational world knowledge interface, ISSN-2249-5428(online),2249-541x(print). • Editorial Board Member, International Journal for advancements in Technical Research and Development, ISSN-2277-405X . • Reviewer of Journal of computers, (JCP),Elsevier journals. • Convener of STTP on Wireless monitoring systems for Biomedical application • PG department coordinator. • Life member of ISTE (LM15012). • Fellow IETE (F502011) • University paper setting, valuation, practical examiner, departmental project coordinator,DepartmentalUniversitypractical examination coordinator. • Member of invention and advanced research centre at SSGMCE,Shegaon. • Incharge of continuing education programme and industry institute interaction cell (CEP and III cell). • Departmental core committee member and incharge of teaching and learning process ofE&TC.departmentaccreditation. • Coordinator for the one day workshop on “Advanced Trends in Processor Design(ATPD-

	<p>2007)”, Dec.07, 2007.</p> <ul style="list-style-type: none"> • Coordinator for one day workshop on “MATLAB and its Engineering Applications”,August 01, 2008. • Member of committee for the preparation of Detailed Project Report of Aeronautical Engineering branch at Priyadarshini College of Engg.,Nagpur. • M.Tech. in ElectronicsEngg. (Communication) coordinator. • RTM University nominated supervisor for M.E. by research. • VTU,Belgavi, supervisor for PhD (Electronics and Communication Dept.) • Member of R.T.M.University examination committee. • Co-coordinator for “GIGYASA-2009”, student convention. • Member of Kesharbai Boob Educational Trust, Nanded (B.K.) Dist.Amravati. • Chaired a techninal session as Jury in National conference on Recent Trends in Engg.and Tech.(RETRET-2013),E&TC Dept.,BDCOE, Wardha,2nd Feb.2013. • Chaired a technical session in 3rdInternatioal conference on ‘Quality upgradation in Engg.,Science and Technology(IC-QUEST 2014), organized by BDCOE,Wardha,19th April 2014. • Chaired a technical session in 4thInternational conference on ‘Quality upgradation in Engg.,Science and Technology(IC-QUEST 2014), organized by BDCOE,Wardha,11th April 2015. • Conference committee member World’s Academy of Science and Technology (WASET) ,14thInternational conferenceonBiosingals and BioroboticsEngg.,(ICBBE), Geneva,Switzerland,Sept.2016.
Research Contribution	<ul style="list-style-type: none"> • Research Paper Published: Total:59 • JOURNALS, International: 33 <p>(1) “ Design Overview of processor based Implantable Pacemaker” published in International journal of computers (Academy publisher) Vol.3.No.8, 2008, pp.49-57 (UGC approved/SCOPUS).</p> <p>(2) “ Algorithm to optimize code size and energy consumptioin in real time embedded system “ published in International journal of computers (Academy publisher) Vol.3.no.6, 2008,pp.15-21(UGC approved/SCOPUS).</p> <p>(3) “ A significance of VLSI techniques for low power real time system, published in IJFCA</p>

	international journal,ISBN: 978-93-80746-20-3.
(4)	“Overview and analysis of UWB for low power WPAN published in IJFCA international journal, ISBN: 978-93-80746-3.
(5)	“Design and Improvement in WiMAX 3G using multiple keys” published inInternational journal of Engineering Science and Technology (IJEST), Vol.3, No.7, July 2011,pp. 5964-5973,ISSN:095-5462.
(6)	“Implementation and analysis of Traffic adaptive MAC protocol for wireless sensor network” International journal of Multidisciplinary research (IJMR), Vol.1, April 2012,pp.57-61, ISSN:2277-9302.
(7)	“ Detection and Removal of Black Hole in Mobile Ad-hoc Network (MANET)”,International Journal of Electrical and Electronics Engineering (IJEET), ISSN (PRINT): pp.2231 – 5284 Vol-1 Iss-4, 2012
(8)	“Forgery Detection technique basedon Block and feature based Method”,International Journal of Advanced research in Computer and communication Engineering,Vol.3,Issue 6,June 2014,pp.2319-5940 ISSN: 2278-1021.
(9)	“Review on Efficient OFCDM Techniques”, International Journal of Research in Advent Technology, Vol.2, No.2, February 2014 ,E-ISSN: 2321-9637(UGC approved).
(10)	“Efficient OFCDM Techniques in 4G”,International Journal of Engineering Research and Applications as well as for oral presentation at "International Conference on Industrial Automation and Computing (ICIAC-2014)" at Jhulelal Institute of Technology,Nagpur,ISSN 2248-9622,12-13 April2014(UGC approved).
(11)	“Design and implementation of Adaptive Echo canceller based LMS and NLMS algorithm” International research journal of application or Innovationin Engineering and Management (IJAEM), ISSN:2319-4847,Vol.3,issue 6,June 2014(UGC approved,SCOPUS,SCIE,WEB of Science).
(12)	“Design strategies for classification of abnormalities in Retinal Images using ANFIS”, International journal of Applicatopm or Innovation in Engineering and Management(IJAEM),ISSN 2319-4847, Vol.3, Issue 3, March 2014,pp.388-393(UGC approved,SCOPUS,SCIE, WEB of Science).
(13)	“Design of Floating point Arithmetic logic unit with Universal Gate”,International journal

	of Technological Exploration and Learning (IJTEL),ISSN 2319-2135,Vol.3,Issue 3,2014.
(14)	“VHDL Implementation of Universal Asynchronous Transmitter”, International Journal of Engineering and Research (IJERT),ISSN 2278-0181,Vol.3,Issue 06,June 2014.
(15)	“ Design and Implementation of Floating poing Multiplier using Wallace and DaddaAlgorithm”,InternationalJournal of application or innovation in Engineering and Management (IJAIEM) ,ISSN 2319-4847,Vol.3,Issue 6,June 2014(UGC approved,SCOPUS,SCIE, WEB of Science).
(16)	“Multicode Techniques in 4G”, International journal of computer trends and Technology (IJCTT) ,ISSN 2231-2803, Vol.11,Issue 4, May 2014(UGC approved).
(17)	“AM-FM based Prediction of Multiple Sclerosis in Brain MRI Images”, International journal of computer applications (IJCA),ISSN:10.5120/17682-8533, Vol.101,Issue 5,2014.
(18)	“Wheeze Extraction Using Analog Filter For Asthma Patients”, International Journal of Emerging Technologies in Engineering Research, Vol.1, Issue 1, July 2016.
(19)	“Energy Efficiency of Wireless Sensor Network using Reactive and Proactive Protocol”, International Journal of Computer Applications ,ISSN:0975 – 8887, Vol. 105 – No. 1, November 2014.
(20)	“A New Approach of Energy Efficient Role Assignment Algorithm for Maximizing Lifetime in Wireless Sensor Network”, International Journal of Computer Trends and Technology (IJCTT) , 2231--2803-Vol 39, No.1 sept. 2016 (UGC approved).
(21)	“An Overview on a Low Power Telemedicine System”, International Journal on Recent and Innovation Trends in Computing and CommunicationISSN: 2321-8169,Vol.3 ,Issue 5 , IJRITCC , May 2015,pp. 258 – 262.(UGC approved)**.
(22)	"Comparative Analysis of Different Classifiers to Detect the Disease in Brain MRI Images". published in International journal of Computer Trends and Technology(IJCTT) 2231--2803-Vol 39 No.1 sept 2016(UGC approved).
(23)	“Performance evaluation of OFDM Based Wimax Physical layer under multipath Fading Channel with Different Modulation schemes and cyclic prefix”,published in Global journal of Engineering , Jan-Feb.,2016,PP.13-18.
(24)	“Multi-method segmentation for disease detection in Brain MRI Images”,published in

Science Direct Material today proceedings XX(2016)XXX-XXX,2214-7853,2016
(ElsevierScience Direct).

- (25) “Network on Chip router with power management unit for Improved network fabric power efficiency”, published International journal of recent trends in Engineering and Research,ISSN:2455-1457,Vol.3,Issue 5 ,May 2017.
- (26) “ NOC Router with Dedicated Power Management Unit”, International rt Journal for Research in Applied Science and Engineering Technology,ISSN:No.2321-9653(**UGC approved**).
- (27) “Low complexity frequency logic controller for Network on chip router”,
Elixir Internal JournalEngg.108(2017),47560-47562.
- (28) “Design and Implementation of Wearable wireless health monitoring module” published in journal of applied science and computations(JASC), ISSN:0076-5131, Vol.5, Issue 5th May 2018, pp.78-82(**UGC approved**).
- (29) “Dual Dielectrically Modulated Electrostatically Doped Tunnel-FET for BiosensingApplications”,International Journal on Emerging Technologies, Vol.10Issue 4,Nov.2019,pp.01–06(**Scopus/UGC approved**).
- (30) “ Next Generation Logic Gate Designs using Improved Polarity Control Bipolar Junction Transistor”, International Journal of Recent Technology and Engineering (IJRTE), Volume-8 Issue-4, pp. Nov. 2019,pp.2015-2019 (**Scopus/UGC approved**).
- (31) “Smart ECG monitoring wireless system”, Internatioinal journal of Engineering and advanced technology (IJEAT),Volume-9 Issue-2, December 2019(**Scopus/UGC approved**).
- (32) “ImplantablePacemakerLowPowerTelemetryUnit”Bookchapter,dDisruptiveD evelopmentsinBiomedicalApplications)CRCPress,TaylorsandfrancisGroup.
- (33) “ProgressionDetectionofmultipleSclerosisInBrainMRIimages”,AppliedArtifi cialIntellegence(AbiomedicalPerspective)CRCPress,TaylorsandfrancisGrou p: **tobepublished**
 - CONFERENCES ,International:20
- (1) “ Detection and Removal of Black Hole in Mobile Ad-hoc Networ(MANET)”, International conference on Electrical and Electronics Engg.(ICEEE-2012),Nainital,20th

	May 2012,pp-11-13, ISBN:978-93-81693-97-1.
(2)	“ Security advances in WiMAX 3G using multiple keys” ICSE-2011, International conference at Rohtak, Haryana, January.21-23,2011, pp. 107-111,ISBN:978-981-08-7931-0.
(3)	“ Mac module structure for secure simplification WIMAX ”, ICICES-2011,International conference at Chennai,Feb.23-24,2011.
(4)	“WBAN based Health monitoring by using OMNeT++”,ICICES-2011,International conference at Chennai,Feb.23-24,2011.
(5)	“Software Related current/ Energy Estimation in Processor based Implantable Pacemaker”, IICC-2008,IEEE International conference at IIT Kharagpur, Dec. 8-10, 2008.
(6)	“Design overview of low power Implantable pacemaker using MSP 430 F 1612,SPIT-IEEE-2008, International conference at Mumbai,Feb.4-5 .2008.Vol.2,pp.236-242.
(7)	“Hardware/Software co-design techniques in low power embedded system”, (ICMECS-2007), International Multiconference of Engineers and Computer Scientists, Hongkong, March 21-23, 2007, pp. 1716-1721.
(8)	“Object position detection strategy , analysis and control with Direct Digital Controller”, (IASTED MSO-2004), International Conference on “Modeling, Simulation and optimization, at Kauai, Hawaii, USA, August 16-19, 2004,pp. 199-204.
(9)	“The assessment of deteriorating level of transformer oil by (A) Ferrographic technique and (B) Thermal ageing failure data”, CEIDP-1995, IEEE International conference “Conference on Electrical Insulation and Dielectric Phenomena,” Oct.22-25, 1995, at Virginia (USA), pp. 313-315.
(10)	“Efficient OFCDM Techniques in 4G”,International Journal of Engineering Research and Application(IJERA) as well as for oral presentation at International Conference on Industrial Automation and Computing (ICIAC-2014)" at Jhulelal Institute of Technology, Nagpur,12-13 April,2014,ISSN2248-9622,pp.1-5.
(11)	“ Impletation and Analysis of a traffic adaptive MAC protocol for wireless sensor networks”,International conference on Interdisciplinary research and Development in Management, Engineering , Technology and social sciences,atTuli imperial Nagpur,28-

29th April,2012.

- (12) “Lung Sound Analysis Based Methodology to Identify Asthmatic Patient for Low Power Low Cost Embedded System “,IEEE International Conference on Energy Systems and Applications (ICESA 2015) ,Dr. D. Y. Patil Institute of Engineering and Technology, Pimpri, Pune, 30-31st October 2015.
- (13) “Review on Wheeze Monitoring for Asthmatic Disorders”, 2nd International Conference on Science and Technology for Society,(ICSTS-2015),19-21stMay 2015.
- (14) “Identification of Asthma using Optimum WPT and it's Coefficient for Development of Low Power Low Cost Embedded System”,IEEE International Conference on Communication Networks (ICCN-2015),ITM University, Gwalior, Madhya Pradesh 19-21st November 2015.
- (15) “Advanced Embedded System for Identification of Asthma”, International Conference on Engineering and Material Sciences ,Jaipur National University, Jaipur,17-19th 2016.
- (16) “Energy Efficiency of Wireless Network Using Balance Routing”, 2015 International Conference on Computational Intelligence and Communication Networks,IEEE Computer society, 2015,pp.100-108.
- (17) “Improving Lifetime of Wireless Networks Using Secure Hybrid Compression and Routing Techniques”,International Conference on Engineering and Material Sciences , Jaipur National University, Jaipur,17-19th 2016.
- (18) “Development of Low Power Cardiac Telemetry System”,2015 IEEE International Conference on Communication Networks (ICCN) , ITM University, Gwalior, Madhya Pradesh 19-21st November 2015.
- (19) “Realization of Low Power Telemedicine System to Monitor Temperature and Heart Beats”,International Conference on Energy Systems and Applications (ICESA 2015) at Dr. D. Y. Patil Institute of Engineering and Technology, Pune, India, 30 Oct. - 01 Nov. 2015,pp.652-656.
- (20) "Application of FCM Clustering on AM-FM to Detect MRI Disease Progression For Multiple Sclerosis" published in IEEE Conference CICN-2015,12-14 Dec. 2015.

- CONFERENCES, National: 6

	<p>(1) “Performance evaluation of Modulation Schemes for UWB “ NCWC-2010 National Conference on Advances in Wireless Communications, pp.143-146.</p> <p>(2) “Current estimation in low power Implantable pacemaker using MSP 430 F1612”, IEEE conference at Pune, March 7-9, 2008.</p> <p>(3) “Novel four step search algorithm for low bit rate video applications”, NCDC-2006, National conference on Distributed computing organized by Dr.D.Y.Patil institute of Engineering, Pune. 1-2 Sept. 2006, pp.319-325.</p> <p>(4) “DVS and Dual VDD architecture for embedded SOC Design”, (TSYGCECA 2006), National conference organized by Govt. College of Engg., Aurangabad, Jan. 23-24, 2006, pp.285-290.</p> <p>(5) “Finger print recognition system”, State Level IEEE conference on Signal processing and parallel computing, July 5-6, 2003 at MIT Alandi, Pune.</p> <p>6) “Design of Floating Point Arithmetic Logic Unit with Universal Gate”, National Conference on Ingenious Science, Technologies & Management, “SAMVID 2014”, at SSITM, SSTC, Bhilai, on 21st Feb 2014.</p>
FDP/Workshop Attended	<p>10. Winter/Summer school /seminar/workshop attended:</p> <ul style="list-style-type: none"> • 03 weeks “Induction Training Programme for Engineering Teachers”, (AICTE sponsored) at Academic Staff College, University of Pune, 22/05/95 to 10/06/95. • 03 weeks “Induction Training Programme for Engineering Teachers”, (AICTE sponsored) at Academic Staff College, Aligarh Muslim University, Aligarh, 16/03/98 to 04/04/98. • 02 weeks AICTE-ISTE winter school on “Advances in Power Electronics” at VRCE, Nagpur, 04/11/1997 to 15/11/1997. • 02 weeks AICTE-ISTE sponsored short-term training Programme on “VHDL programming and ASIC design” at MREC Jaipur, 30/10/2001 to 09/11/2001. • 02 days National workshop on “Optical Fibre Communication & Applications” at B.N. College of Engg. Pusa, 07-08/03/2001. • 02 days National workshop on “Matlab for Engg. Applications” at SSGMCE, Shegaon, 23-24/02/2002. • 01-day workshop on “Quality in Engg. Education” at SSGMCE, Shegaon, 25/02/1999. • 02 days National workshop on “ATM technology for Multimedia” at SSGMCE, Shegaon,

12-13/02/2000.

- Participated in Exploratory seminar on “Accreditation & Autonomy purpose process and prospects”, at SSGMCE, Shegaon, 11-12/11/2000.
- 01 week AICTE-ISTE sponsored short-term training programme on “Biomedical equipment technology” at Govt. College of Engineering, Amravati, 5-10, June 2003.
- 02 weeks AICTE-ISTE sponsored short-term training programme on “Networking trends for global communication” at PSG TECH., Coimbatore, 28 March-10 April 2004.
- 02 days International conference organized by, World Semiconductor Forum on **GOSPL** at New Delhi, 30-31 Oct. 2004.
- 01 week course at IIT Kanpur, 6-21 May 2005.
- Two days national workshop on ARM processor organized by SSGMCE, Shegaon, 25-26, August 2006.
- One day workshop on “Design of communication system using simulation software” at Priyadarshini College of Engineering, Nagpur, 4 Feb. 2007.
- 01 week short term course on Embedded system and Technology at IIT Kharagpur, 25-30 June 2007.
- One day training programme on “Intellectual property rights by Govt. of India, Ministry of commerce and Industry” at Nagpur.
- One day seminar on “Computational Electromagnetics, RF Antenna design and simulation” organized by Institute of Engineers, Nagpur and Ni logic pvt. Ltd. Pune, 20 August 2009.
- 5 days STTP on “Wireless monitoring systems for Biomedical application” at Electronics and Telecommunication Engg. Dept., Priyadarshini college of Engg. Nagpur, 19 to 23 Sept. 2011.
- One day workshop on Syllabus Reframing for IT/CE/CSE/CT/ME/EE, organized at Smt. Radhikata iPandav College of Engg., 2nd Dec. 2011.
- Two days National Seminar on “Power Electronics: A key technology for Renewable Energy System” at RGCER, Nagpur, 12-13 April 2016.
- Short term training program on “Android Application Development”, at

	<p>RG CER, Nagpur, 26-30 , April 2016.</p> <ul style="list-style-type: none"> • NPTEL Half week FDP on “Teaching and Learning in Engineering ”, Feb.-March, 2019. • NPTEL One week FDP on “Introduction to Research”, Feb.-April ,2019. • Participated in IEI technical Webinar on “Recent trends in internet of things” on 6/4/2022. • Participated in IEI technical Webinar on “Advances in production Engineering” on 05/04/2022. • Participated in IEI technical Webinar on “Computer Architecture-Era of Multicore processor and path ahead” on 26/08/2023. • Academic Leadership Alignment Program on NEP Implementation Pathway Services (NIPS) two days workshop at COEP Technological University, Pune, 3-4 Feb. 2023. • Participated in IEI technical Webinar on “ AI and Robotics” on 14/10/2023.
Awards	<p>11. Achievements:</p> <ul style="list-style-type: none"> • Received travel grants of Rs.69625, Rs.48750 and Rs.37006 from AICTE to present a paper in international conferences at Kauai (USA), Austria and Hongkong respectively. • Nomination in “Marquis Who’s Who in the World” magazine-2007. • Best paper award at TSYGECA-2006 at Aurangabad. • Chairmen offer for paper presentation session at Cheurburg, France. • Reviewer of IAENG International Journal of Computer Science (IJCS). • Presented a paper in International multiconference of Engineers and Computer scientists (IMECS-2007) at Hongkong during 21-23, March 2007. • Excellence award received from DYP Group • Academic Excellence (Principal Category) by Institution of Engineers (India)