Dr. D. JAYADEVAPPA
B.E., M.Tech, Ph. D.
PRINCIPAL
Dr. H N National College of Engineering
Jayanagar, Bengaluru – 560070

Parents	:	Sri H. Devappa & Smt. Devarajamma
		Retd. Teacher
Wife	:	Smt. M Latha kumari
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Official Address	:	Principal
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Nationality	:	Indian
Religion	:	Hindu
Date of Birth	:	22nd July, 1970

Educational Qualifications:

Sl. No.	Degree	Branch	Specialization	College &University	Year of Completion
1	Ph.D.	ECE	Image Processing	JNTUCE, JNTU, Kakinada (A.P)	2011
2	M.Tech	Instrumentation Technology	Biomedical Instrumentation	SJCE, Mysuru, VTU	2000
3	B.E	Electronics &Instrumentation Engineering	Instrumentation Technology	SIT, Tumkur,Bengaluru University	1994

Details of Doctoral thesis:

Area   **:**Digital Image Processing

Title   **:**Development & Performance Evaluation
of Medical Image Segmentation Algorithms

Professional Experience:

Sl.No.	Institution	Position held	Duration
1	Dr. H N National College of Engineering, Jayanagar, Bengaluru	Principal	August 2024 to till date
2	JSSATE, B'lore	Professor & Head	Aug. 2020 to Aug. 2024
3	JSSATE, B'lore	Professor	Aug. 2011- till to date
4	JSSATE, B'lore	Professor & HOD	Aug. 2011- Nov. 2015
5	MSRIT, B'lore	Associate Professor	July. 2010 - Aug. 2011
6	MSRIT, B'lore	Asst. Professor	Dec. 2006 - July. 2010
7	MSRIT, B'lore	Lecturer	Oct. 2000 - Dec.2006

Industrial Experience:

SL.No.	From	To	No. of Yrs.	Designation	Name of the Company
1	1994	1997	3 Years	Engineer	IPA Pvt. Ltd. Bengaluru

Administrative Experience:

Sl.No.	Administrative Post held	Duration
1	HOD, Dept. of Electronics&Instrumentation Engineering, JSSATE, Bengaluru.	2011 – 2015& 2020 to till date
2	JSSATE Boys Hostel Warden	2015 – 2016
3	NBA Reviewer (College level)& Coordinator (Dept. level)	2015to till date
4	Chief Coordinator, NAAC, JSSATE, Bengaluru & Responsible for obtaining 'A+' grade	2020 till date

Achievements as Head of the Department:

- Coordinated International Conference ISCIPCA-2017
- Active role in implementation of OBE in the Department
- Developed Signal & Image Processing laboratory
- Developed state of the art computer laboratories
- Improvement in the ambience of the department
- Networking with the faculty of higher learning institutes
- Modernization of Electronics Laboratories
- Organized Faculty Development Programmes (FDP)
- Organized ISTE State level student convention
- Organized National level Robotic Competition
- Organized state level project exhibitions
- Organized Technical fests in the department
- Coordinated college level techno cultural fest (VERVE)

Membership in various University Boards / Committees / Other:

Sl. No.	Body	From	To	Name of the University / Institution /
1	BOE member	2011	2012	VTU, Belagavi
2	BOE Chairman	2012	2013	VTU, Belagavi
3	BOE member	2013	2014	Dr. AIT, B'lore
4	BOS member	2014	2015	SIT, Tumkur
5	Advisory Committee Member	2014	2015	SIT, Tumkur
6	BOE Member	2015	2016	RVCE, B'lore
7	BOE Chairman	2016	2017	VTU, Belagavi
8	LIC Member	2019	2019	VTU, Belagavi

9	BOE Member	2021	-	UVCE, Bengaluru
10	BOE Member	2023	-	MCE, Hassan
11	LIC Member	2023	2023	LIC Member
12	BOE member	2013	-	Dr. AIT, B'lore
13	BOE member	2024	Till date	VTU, Belagavi

Invited Lectures/Session chair:

➢ More than 20 invited lectures are delivered in reputed institutions and also at Jain University, Bengaluru, in the areas of Signal and Image Processing, Research Methodologies, and Biomedical Instrumentation, etc.

➢ Chaired 10 International Conferences & Five National Conferences

Research Experience and Guidance provided:

Total research experience : 18 years

➢ **16**candidates have completed their Ph.D., under my guidance
➢ Presently **4**candidates are pursuing their Ph.D., under my guidance
➢ Adjudicated 8 Ph.Ds.

Details of Ph.D. awarded under my supervision:

Sl. No.	Name of the Research Scholar	Title of the Thesis	Year of Completion
1	K. Ezhilarasan CMRIT, Bengaluru	Design and Development of an Efficient Image Compression Algorithms with Novel Architecture for FPGA Implementation	July 2020
2	Mr. Santosh Dattatray Bhopale, Associate Prof., TKIET, Kolhapur	Enhancement in Routers for Next-Generation-Network (NGN) based on QoS	Jan 2020
3	Mr. Sharan Kumar, Associate Prof., Agadi College of Eng., Gadag.	Development and Performance Evaluation of Brain Tumor Segmentation in Magnetic Resonance Images using Deformable Models	Oct. 2019
4	Mr. G Parameshappa Asst. Prof. JSSATE, Bengaluru	Analysis and Design of Digital Filter Banks for Hearing Aid Applications	April 2019
5	Mr. Shankar B B Associate Professor, NMIT, Mangaluru	Adventitious Sound Analysis: An Exploration of Hilbert Huang Transform	March 2019
6	Mr. Satish Tunga, Associate Professor,	Study, Exploration and Development of Efficient Algorithmic Models for Content	Feb. 2018

	MSRIT, Bengaluru.	Based Image Retrieval	
7	Mr. Ananth Kumar, Associate Professor, BTLCE, Bengaluru	Development of Next Generation NOC-SOC Smart Router	July 2018
8	Mr. Gururaj C Asst. Prof., BMSCE, Bengaluru	Design & Development of New Algorithmic Models For Content Based Image Retrieval	March 2017
9	Ms. Puspa S Assoc. Prof., Dayanad Sagar University, Bengaluru	Design & Development of Robust Digital Watermarking Algorithms for Medical Images	April 2017
10	Mr. Harish M Wipro Limited, Bengaluru	FPGA Implementation of Hybrid Processor	April 2021
11	Manjula C Associate Prof. Oxford College of Engg, Bengaluru.	FPGA Based Scalable Digital Automated Testing Systems for Processors	August 2021
12	Mr. Subodh S I Pursuing Post-Doctoral in Germany.	Design and Performance Evaluation of Watermarking Schemes in Medical Images	Feb. 2022
13	Sreerangappa M Associate Prof., SSIT, Tumkur	Development and Performance Evaluation of Segmentation Algorithms using MR Images	March 2023
14	Bhanumathi K S Associate Prof., JSSATE, Bengaluru	Development of Emotion Recognition Algorithms for Basic Drives Detection using EEG	August 2023
15	Mrs. Komala K Associate Prof., Dept. of ECE, SSIT, Tumkur	Design & Development of Efficient Algorithms for Multiple Ques in Emotion Recognition	Feb. 2024
16	Mrs. Mamatha V Shetty	Development & Performance Evaluation of Automatic Segmentation methods for Lung Tumor using Deformable Models	April 2024
17	Mr. Duney D Sham	Low Power Design of PQ Data Compression and Communication Modules for Smart Meter on FPGA	June 2024

Details of Research Scholars pursuing Ph.D. under my guidance (Presently):

Sl.No.	Names of Research Scholars	Area of the Research	Year of Registration
1	Mr. Sachin A Urabinahatti	Algorithms for Automatic Segmentation of Mammography Images	2016
2	Mrs. Sumana Achar	Sequential Power Optimization Technique for ASIC Design using High-level Synthesis	2021

Other Details:

Approved Supervisor to supervise the Research scholars admitted in the following Universities:

- VTU, Belagavi
- Siddhartha University, Tumakuru
- Jain University, Bengaluru.

ORCID ID: 0000-0003-1298-4265

Scopus ID: 23985327700

Researcher ID: W-3766-2018

Vidwan ID : 101800

Google scholar link: https://scholar.google.com/citations?user=yn45LkcAAAAJ

Citations:

Citation Indices	All	Since 2019
Citations	559	382
h-Index	11	9
i10-Index	15	8

Details of Publications:

Total Publications: **118**

Number of papers published in International Journals   :**77**

Number of papers published in National Journals   :**02**

Number of papers published in International Conferences   :**33**

Number of papers published in National Conferences   :**05**

        Book Chapter   :**01**

International Journals

[1]. **D Jayadevappa,** S. Srinivas Kumar, & D.S. Murthy, "A New Deformable model based on Level sets for medical Image segmentation," International Journal of Computer Science (IJCS), Vol.36, No.3, pp.199-207, Dec. 2009.

[2]. **D Jayadevappa,** S.Srinivas Kumar, & D.S. Murty, "A Hybrid segmentation model based on watershed and gradient vector flow for the detection of Brain tumor," International Journal of Signal Processing, Image Processing and Pattern Recognition, Vol.2, No.3, pp. 29-42, Sept. 2009.

[3]. **D. Jayadevappa**, S. Srinivas Kumar & D. S Murty "Medical Image Segmentation Algorithms using Deformable Models: a Review," IETE Technical Review, Vol. 28, No.3, May-June 2011.

[4]. D. Maheshkumar, S. C Prasannakumar, B. G Sudarshan &**D Jayadevappa**, "Heart Rate Variability: A Review", International Journal of Advance Research in Science & Engineering, Vol. 3, Issue 1, Jan 2014.

[5]. D. Maheshkumar, S. C Prasannakumar, B. G Sudarshan &**D Jayadevappa**, "Heart Rate Variability is a Noisy Time Series Having Self-Similar and Self Affine Characteristics", International Journal of Electrical and Electronics Engineers, Vol. No.1, Issue No. 2, July-Dec, 2014.

[6]. Sharan Kumar, **D Jayadevappa**, Radhika Naik, "Implementation of Image Segmentation Algorithm using FPGA", International Journal of Engineering Research & Technology, Vol. 3, Issue 4, April 2014.

[7]. Sharan Kumar, **D Jayadevappa**, Radhika Naik, "Implementation of Huffman Image Compression & Decompression Algorithm", International Journal of Innovative Research in Electrical, Electronics, Instrumentation & Control Engineering, Vol. 2, Issue 4, April 2014.

[8]. Sharan Kumar, **D Jayadevappa**, Radhika Naik, "Implementation of Image Edge Detection Algorithm using FPGA", International Journal of Latest Technology in Engineering, Management & Applied Sciences, Vol. 3, Issue 2, April 2014.

[9].Satish Tunga, **D. Jayadevappa**, C. Gururaj, "A Comparative Study of Content Based Image Retrieval Trends and Approaches", International Journal of Image Processing (IJIP), Volume (9), Issue (3), 2015.

[10]. Puspa Mala S, **D Jayadevappa**, K. Ezhilarasan, "Digital Image Watermarking Techniques: A Review", International Journal of Computer Science & Security (IJCSS), Volume (9), Issue (3), 2015.

[11]. Duney D Sam, **D Jayadevappa,** Syed Aquib R, Krishnamurthy K, "Delineation and Advancement of Electric Power Measuring System using PIC Microcontroller and Processing", International Journal of Current Engineering and Technology, 5(3), June 2015.

[12]. Puspa Mala. S, **D Jayadevappa,** K. Ezhilarasan, "Application of Fractional Wave Packet Transform for Robust Watermarking of Mammograms", International Journal of Telemedicine and Applications, HINDAWI Publishers, Vol. 15, pp. 1-9, Oct 2015.

[13]. Thirunarayana T, Vinay Kumar R, **D Jayadevappa**, "Valve Control using Microcontroller", International Journal of Applied Engineering Research, Research India Publications, Vol. 10, Issue: 44, pp. 31576–31579, 2015.

[14]. M S Ananth Kumar, **D Jayadevappa**,"A Technical Survey of Network Routers", International Multidisciplinary Research Journal, (GRT) Vol. 3, Issue -4, Oct. 2015.

[15]. Santosh D Bhopale, S V Sankpal, D Jayadevappa "A survey on QoS based Routers for Next Generation Network", International Journal of Modern Trends in Engineering and Research, Vol. 2, Issue 9, Sept. 2015.

[16]. M S Ananth Kumar, **D Jayadevappa, "**A Comprehensive Survey of RoutersFunctionality", Indian Streams Research Journal, Vol. 6, Issue5, June2016.

[17].Harish M, **D Jayadevappa, "**Innovative Architecture for FPGA based Multicore Hybrid Processor", International Journal of Scientific & Engineering Research, Vol. No.7, Issue 6, June 2016.

[18]. C. Gururaj, **D Jayadevappa**&SatishTunga, "Content Based Image Retrieval System Implementation through Neural Network", IOSR Journal of VLSI and Signal Processing, Vol.6, Issue 3, pp.42–47, June 2016.

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[22]. Santosh D Bhopale, S V Sankpal, **D Jayadevappa**, "An overview on quality of services based routers for NGN", International Journal of Advanced Research in Computer and Communication Engineering, Vol. 5, Issue 9, pp. 252-257, Sept. 2016.

[23]. Manjula C &**D Jayadevappa**, "FPGA Based Wireless Universal Digital Automated Test Equipment" International Journal of Control Theory and Applications, (IJCTA), 9(41) 2016, pp. 737-742. ISSN: 0974-5572

[24]. K V Mahesan, S Bhargavi &**D Jayadevappa**, "Segmentation of MR Images using Active Contours: Methods, Challenges and Applications", International Journal of Innovative Research in Advanced Engineering (IJIRAE) ISSN: 2349-2763 Issue 02, Volume 4, February 2017.

[25]. SatishTunga, **D. Jayadevappa** & C. Gururaj, "An Improved Technique of CBIR using Gabor Filter and Genetic Algorithm", International Journal of Scientific & Engineering Research (IJSER), ISSN 2229-5518, Volume 8, Issue 2, Feb. 2017.

[26]. Shankar B. B&**D Jayadevappa**, "Adventitious signal identification and estimation of alveolar exudates", International Journal of Latest Engineering Research and Applications ISSN: 2455-7137, Volume 2, Issue 5, PP. 36-40, May 2017.

[27]. Shankar B. B &**D Jayadevappa,** "Estimation of Ensembles in an Adventitious Wave by EMD and EEMDTechniques", International Journal of Engineering Research and Development**,** Volume 13, pp. 30-33, Issue 6, June 2017.

[28]. Satish Tunga &**D Jayadevappa**, "Content Based Image Retrieval using SVM Algorithm with Contourlet Transform Coefficients Distribution," International Journal of Scientific & Engineering Research, Vol. 8, Issue 2, pp. 1089-1094, ISSN 2229-5518, February 2017.

[29]. M S Ananth Kumar, D **Jayadevappa,** "Hardware efficient Low Power Multi-Favor Network on Chip Smart Router on FPGA Chip", International Journal of Industrial electronics and Electrical Engineering, Vol. 5, Issue 6, pp. 72-77, May 2017.

[30]. Sreerangappa M&**D. Jayadevappa,** "Modified Marker Controlled Watershed Algorithm forthe Segmentation Brain MR Image", Grenze International Journal of Computer Theory and Engineering, Vol. 3, Issue 4, pp. 363- 368, Dec. 2017.

[31]. Duney Disney Sam, **D. Jayadevappa** and Cyril Prasanna, "DTCWT-MBOFDM with Reconfigurable Down Converter for Smart Grid communication", International Journal of Grid and Distributed Computing, Volume 10, No. 10, pp. 21-32., 2017.

[32]. Manjula C&**D. Jayadevappa**, "Case Studies of Various FPGA based BIST, ATPG, Processor and Memory Testing",International Journal of Emerging Technology and advanced Engineering, Volume 7, Issue 11, Nov. 2017.

[33]. Shankar B. B &**D Jayadevappa**, "EMD based Hilbert Energy Spectrum Analysis of Adventitious Lung Wave Signals", International Journal of Engineering andTechnology, 7(15), pp. 122-125, 2018.

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[41]. Santosh D Bhopal, S V Sankpal, **D Jayadevappa,** "Enhancement in Routers for Next Generation Network (NGN) based on QOS",Jour of Adv Research in Dynamical & Control Systems, Vol. 10, 08-Special Issue, May, 2018.

[42]. Parameshappa G and **Jayadevapp D,** "Efficient Nonuniform 8-Band Digital FIR FilterBank with FRM Technique for Digital Hearing Aid",Jour of Adv Research in Dynamical & Control Systems, Vol. 10, 12, August 2018.

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[46]. Harish M S &**D. Jayadevappa,** "Design and Simulation of 64 Bit Hybrid Processor Instruction Set using Verilog", International Journal of Engineering and Technology, 7(4.36), 2018. pp. 373-382.

[47]. Shankar B. B &**D Jayadevappa**, "Ensemble EMD based Time-Frequency Analysis of Continuous Adventitious Signal Processing", International Journal of Engineering andTechnology, 7(4.10), pp. 896-899, 2018.

[48]. H.M. William Thomas, S.C. Prasanna Kumar and **D. Jayadevappa,** "Development of Novel Algorithm for the Segmentation of Brain Tumor using Hybrid Approach", Journal of International Pharmaceutical Research,Vol. 19, Issue 24. pp. 217-222, March 2019.http://www.ijprjournals.com/archivesview.php?volume=19&issue=24&page=2

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[51]. Harish M S &**D. Jayadevappa,** "FPGA Implementation of Auto Switching in a Multicore Hybrid Processor", International Journal of Recent Technology and Engineering, ISSN: 2277-3878, Vol. 7, Issue-5S3, Feb. 2019.

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[61]. Manjula C &**D Jayadevappa,** "FPGA Based Clock Frequency Sensor and Range Estimating System for Testing Memories and Processors", International Journal of Electrical Engineering and Technology, Vol. 11, Issue 5, pp. 11-21, 2020.

[62]. Komala K, **D Jayadevappa**& G Shivaprakash, "Human Emotion Detection and Classification Using Convolution Neural Network",European Journal of Molecular & Clinical Medicine, Vol. 7, Issue 6, Nov. 2020.

[63] Subodh S Ingaleshwar, **D. Jayadevappa**, & N V Dharwadkar, "Hybrid Architecture for Reversible Watermarking of Medical Images using Wavelet Transforms", International Journal of Future Generation Communication and Networking, Vol. 13, No. 4, Dec. 2020, pp. 3460–3467, ISSN: 2233-7857.

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[65].Channakesava T &**D Jayadevappa**, "Segmentation of Brain Tumor using Contourlet Transform and Chan-Vese Active Contour Model Approach", European Journal of Molecular & Clinical Medicine, Vol. 8, Issue 2, Feb. 2021.

[66]. Subodh S Ingaleshwar,**D. Jayadevappa**, & N V Dharwadkar, "Heterogeneous architecture for Reversible forWatermarking System for Medical Images using Integer transform based Reverse ContrastMapping", Turkish Journal of Computer and Mathematics Education, Vol. 12, No. 6, April2021.

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Book Chapter

[1] **D Jayadevappa**, Subodh Ingleshwar& Sharan Kumar, "Comparative analysis of deformable models-based segmentation methods for brain tumor classification", Brain Tumor MRI Image Segmentation using Deep Learning Techniques, pp. 215-223, Academic Press, Elsevier, Nov. 2021, ISBN: 978-0-323-91171-9, DOI: https://doi.org/10.1016/C2021-0-00056.

NationalJournals

[1]. **D. Jayadevappa**& D. S Murty, "Algorithm for Segmentation of Medical Images based on Watershed Transform", Journal of Intelligent System Research, Vol. 1, No.2, pp. 123-128, Dec.2007.[2]. **D. Jayadevappa**& S. Srinivas Kumar & D. S Murty, "Active contours for segmentation of brain tissue using MRI data", Journal Analysis & Computation, Vol. 4, No.1, pp. 79-85, Dec. 2008.

International Conferences

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[2]. **D Jayadevappa,** S. Srinivas Kumar & D. S Murty, "A Fast Watershed Algorithm and its Applications to Brain Tissue Segmentation," Proc. of International Conference on Advances in

Computer Vision and Information Technology (ACVIT-IEEE-07), Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Nov. 28th-30th2008.

[3]. **D Jayadevappa,** S. Srinivas Kumar& D. S. Murty, "Automatic Watershed Segmentation & Comparison between Pixel Scan method & Order Invariant Algorithm for Image Segmentation," IEEE International conference on Computational Intelligence & Multimedia Applications (ICCMA-07), Mepco Schlenk Engineering College,Published by IEEE Computer Society, 13th-15th Sep. 2007.

[4].Shankar B. Bandiwaddar**& D Jayadevappa, "**Continuous Adventitious Sound: A signal Review", International Conference on Information & Communication Engineering, ICICE-2013, 28th June 2013, Bangalore, ISBN: 978-81-31703-83-2, Published by IRD India.

[5]. C. Gururaj, **D Jayadevappa &**Satish Tunga, "Colour and Shape Based Image Retrieval Technique Using CBIR: A Review", 2nd International Conference on Communications & Signal Processing, April, 2013.

[6].C. Gururaj,**D Jayadevappa,**& Satish Tunga, "Novel Algorithm for Exudate Extraction from Fundus Images of the Eye for Content Based Image Retrieval System", 4th IEEE International Conference on Control System, Computing& Engineering (ICCSCE-14), Penang, Malaysia,28th-30th November 2014.

[7]. C. Gururaj, **D Jayadevappa**& Satish Tunga, "An Effective Implementation of Exudate Extraction from Fundus Images of the Eye for Content Based Image Retrieval Systemthrough Hardware Description Language",Applied Computing Communications Engineering Image Processing and Analysis Information Science and Technology, NMIT, Bangalore, ERCICA-15,DOI/10.1007/978-81-322-2553-9Springer India, 2015.

[8]. Puspa Mala S, **D. Jayadevappa**& K. Ezhilarasan, "Performance Analysis of Block Based SVD Watermarking Scheme for Medical Images", IEEE International Conference on Recent Trends in Electronics Information Communication Technology (RTEICT), RJIT, Bangalore, DOI: 978-1-5090-0774-5/16/IEEE, May 20-21, 2016.

[9]. Santosh Bhopale, Swati Sankpal, **D. Jayadevappa**& Sharan Kumar, "Implementation of QOS based Policer in Routers for Next Generation Network (NGN)",International Conference on Advanced Technologies for Societal Applications 20-21 December 2016, Shri Vithal Education & Research Institute's, College of Engineering, Pandharpur, Springer International Publishing AG 2018, DOI 10.1007/978-3-319-53556-2_104.

[10]. Manjula C&**D Jayadevappa**, "FPGA Based Wireless Universal Digital Automated Test Equipment", 2nd International Conference on Sustainable Computing Techniques in Engineering, Science and Management (SCESM-2017), Jain College of Engineering Belgaum, 27th -28th January 2017.

[11]. Sreerangappa M&**D. Jayadevappa**, "Graph Cuts and Contourlet Transform for Automatic Segmentation of Brain Tumor from MR Images", IEEE International Conference on Wireless Communications, Signal Processing and Networking (WISPNET17), SSN College of Engineering, Chennai, 22nd - 24th March 2017.

[12]. Rangappa&**D. Jayadevappa**, "Modified Marker Controlled Watershed Algorithm for the Segmentation Brain MR Image", Presented in IEEE International Conference on Signal Processing, Image Processing, Communication & Automation (ICSIPCA-17), JSS Academy of Technical Education, Bengaluru,6th& 7th July 2017.

[13]. Satish Tunga&**D. Jayadevappa**&Gururaj C, "Zernike Moments with Contourlet Transform for Content Based Image Retrieval", IEEE International Conference on Signal Processing, Image Processing, Communication & Automation (ICSIPCA-17),JSS Academy of Technical Education, Bengaluru,6th& 7th July 2017.

[14].Ranjan Sharma, Gaurav Kumar, Abhay Naik, Arjun Patil &**D Jayadevappa** "Density Based Traffic Control Signal with Emergency Override", IEEE International Conferenceon Signal Processing, Image Processing, Communication & Automation (ICSIPCA-17),JSS Academy of Technical Education, Bengaluru, 6th& 7th July 2017, Pro. Published by Grenze Scientific Society, Grenze ID: 02. ICSIPCA.2017.1.18.

[15]. Anu Shamaiah, D Mahesh Kumar&**D Jayadevappa** "CORDIC Architectures: A Review",Presented in IEEE International Conferenceon Signal Processing, Image Processing, Communication & Automation (ICSIPCA-17), JSS Academy of Technical Education, Bengaluru, 6th& 7th July 2017.

[16]. Komala &**D Jayadevappa**, "Man Machine Interface –A Review", Int. Conf. on Signal, Image Processing Communication &Automation (ICSIPCA-17), JSSTE, 6th& 7th July 2017. Pro. Published by Grenze Scientific Society.Grenze ID: 02. ICSIPCA.2017.1.18.

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[18]. Manjula C &**D Jayadevappa,** "Command driven scalable & programmable FPGABased Digital Test Pattern Generator", 2017 IEEE International Conference on Electrical, Electronics, Communication, Computer and Optimization Techniques(IEEE-ICEECCOT-17), 15-16 Dec. 2017, GSSSIETW, Mysuru.

[19]. Shankar B. B &**D Jayadevappa**, "Estimation of exudates in alveoli generating abnormal lung sounds ", 7th IEEE International Advance Computing Conference January 5, 2017, IACC-17, Hyderabad, India.

[20]. Komala K&**D Jayadevappa**, "2-D Gabor based Human Emotion Recognition System", International Conference on New Trends in Engineering & Technology (ICNTET), 7th& 8th Sep. 2018, GRT Institute of Technology, Chennai (TN).

[21]. Shankar B. B&**D Jayadevappa,** "Ensemble EMD based Time-FrequencyAnalysis of Continuous Adventitious Signal Processing",World Summit on Advances in Science, Engineering and Technology (Cambridge Summit 2018), January 4-6, 2018, University of Cambridge, UnitedKingdom, DOI. 10.14419/IJET.V7I4.10.26783.

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[23]. Sam D, **D. Jayadevappa**&Raj P.C.P. (2019),"FPGA Implementation of Low Power DTCWT Based OFDM Architecture for Smart Meters. In: Hemanth J., Fernando X., Lafata P., Baig Z. (eds), International Conference on Intelligent Data Communication Technologies and Internet of Things (ICICI-2018), 7th& 8th Aug. 2018, Lecture Notes on Data Engineering and Communications Technologies, vol. 26, Springer.

[24]. Pratha G, Rishab Kumar, Subramanya &**D Jayadevappa**, "Development of Robo Child Rescue System from Bore Well", 2nd International Conference on Emerging Trends in Science & Technologies for Engineering Systems (ICETSE-2019), 17th& 18th May 2019, SJCIT, Chikkaballapur.

[25]. Shree Lakshmi, Deepika Venugopal, Akshtha, Neha R &**Jayadevappa D**, "Smart Hydroponic Farm using IOT", Poster presentationfor 4th IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT 2019), 17th& 18th May 2019, SVCE, Bengaluru.

[26]. Sharan kumar, **D.Jayadevappa**& Mamata V Shetty, "Development of Brain MRI Image Segmentation Algorithms using Deformable Models",Proceedings of the 3[rd]IEEE International Conference on Communication and Electronics Systems (ICCES 2018), Oct. 15th&16th 2018, PPG Institute of Technology, Coimbatore. ISBN:978-1-5386-4765-3, pp. 157-160, 2018.

[27] K V Mahesan, S Bhargavi &**D Jayadevappa,** "Algorithm for the Segmentation of Brain Tumor using Contourlet Transform", AICTE Sponsored International Conference on Recent Trends & Development in Information and Communication Engineering (ICRTDIC-2020), 23rd Oct. 2020, Dr. Ambedkar Institute of Technology, Bengaluru.

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[29] Bhanumathi K S &**D Jayadevappa**, "Hunger: A Strong Basic Drive that Controls Human Emotions", IEEE International Conference on Computational Performance Evaluation (ComPE), North-Eastern Hill University, Shillong, Meghalaya, India. Dec 1-3, 2021.

[30] Sumana Achar &**D Jayadevappa**, "FPGA based Design and Simulation of basic Routing Protocols", Fourth IEEE International Conference on Cognitive Computing and Information Processing (CCIP-2022), 23rd -24th Dec. 2022, JSS Academy of Technical Education, Bengaluru.

[31] **D Jayadevappa**& Sachin Urabinahatti, "Breast Cancer Detection using Deep Learning Techniques", 2nd IEEE International Conference on Distributing and Electrical Circuits Electronics, 29 -30th April 2023, BITM, Ballari.

[32] Mamatha Shetty, **D. Jayadevappa,** Sumana Achar, "Automatic Segmentation Methods for Lung Cancer Using Deformable Models and Deep Learning," 2023 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT), Bangalore, India,July 2023, pp. 1-5, doi: 10.1109/CONECCT57959.2023.10234825.

[33] Sumana Achar &**D. Jayadevappa** "An efficient Architecture towards development of FPGA based Multifunctional and Smart Network Routing Processor", IEEE International Conference on Multidisciplinary Research in Technology and Management – MRTM 23, organized by New Horizon College of Engineering, Bengaluru on 22nd& 23rd Sept. 2023.

NationalConferences

[1]. **D. Jayadevappa**&Varun V. Ramaswamy, "Segmentation of Brain Tissue using Knowledge based (Rule) and Fuzzy Techniques", National Convention on Automation Road Map (NCARM-2005), Gayatri Vidya Parishad College of Engineering, Visakhapatnam, AP.

[2]. **D Jayadevappa**, S. Srinivaskumar& D. S Murty, "A simple Approach to Watershed Transform Based on Pixel Scan for Segmentation of DICOM images", National Conference on Emerging Trends in Engineering & Technology (NC(ET)2-07 held on May 5th 2007 at Saintgits College of Engineering, Kottayam, Kerala.

[3].Lavanya S, Supriya S, Usha K, **D Jayadevappa**and Babu K S "Implementation of 3D-DWT for MR Image Compression using VLSI Architecture," Proceedings of the 1[st]National Conference on Wireless Control & Communication Technology, 27th& 28th April, 2011.

[4]. G Parameshappa,**D Jayadevappa**& K P Ajith, "Approximately Linear Phase Digital Filter Bank with FRM Techniques", National Conference on VLSI, Signal & Image Processing, August 22nd& 23rd 2014, JSSATE, Bangalore.

[5]. Shree Lakshmi, Deepika Venugopal, Akshtha, Neha R &**Jayadevappa D**, "Smart Hydroponic Farm using IOT", 5th National Conference on Advancements in Information Technology, 10th& 11th April 2019, JSSATE, Bengaluru.

Other Experiences:

- Observer, JEE & NET conducted by CBSE, New Delhi
- Research review committee member, Siddhartha University, Tumkur
- Research review committee member, MSRIT, Bengaluru
- Research review committee member, KSSEM, Bengaluru
- Examiner at Jain University, Bengaluru
- Examiner at Autonomous institutes.
- Adjudicator /Examiner for Ph.D., students at VIT, Vellore, MIT, Manipal University, Manipal, Reva University, Bengaluru.
- Audited SSR for NAAC at KIT, Tiptur, HKBKCE, Bengaluru
- Academic & administrative audit at SIT, Tumakuru

Reviewer of Research Papers:

- Biomedical Engineering: Basis & Applications, World Scientific Publishers.
- Informatics in Medicine, Elsevier Publishers
- Journal of Medical Imaging and Health Informatics, American Scientific Publishers
- OPTIK Journal, Elsevier, Science Direct
- International Journal on Interactive Design and Manufacturing, Springer
- Computers and Electrical Engineering, Elsevier, Science Direct
- International Journal of Biomedical Imaging Processing (JBIP), Bowen Publishing Company Ltd.

- Asian Journal of Mathematics & Computer, International Knowledge Press, Manchester.
- British Journal of Mathematics & Computer Science, Science Domain International.
- International conferences held at Manipal University, Manipal.
- International conferences held atT. John College.

Membership – Professional Societies:

- Life Member, Indian Society for Technical Education (ISTE), New Delhi.
- Life Member, Institute of Electronics and Telecommunication Engineering (IETE), New Delhi.
- Life Member, Bio-Medical Engineering Society of India (BMESI).

Details of Workshops organized for the faculty& students in the department:

1. Two Days Workshop on "Applications of Wavelets for Signal & Image Processing in Research" organized by the dept. of Inst. Technology, JSSATE, during 8th& 9th April 2013.
2. Three Days FDP programme on "Matlab Tools for Research with hands-on experience", organized by the dept. of Inst. Technology, JSSATE, during 4th to 6th Feb 2013.
3. Technical seminar on "Industrial Automation Systems" from SIEMENS and International Editors Elektor India, 22nd Aug 2012.
4. One Day Seminar on "Advancements in Process Instrumentation &Automation" Dr.Nayan G &Mohd.Wasif, YOKOGAWA, B'lore, 23rd Feb 2013.
5. One Day Seminar on "Microcontroller applications" by Prof. Nitin Awasthi, APSIS Ltd. B'lore, 16th Feb 2013.
6. One Day "Technical Seminar on Industrial Automation" byPrateesh, Asst. Manager, Prolific Systems & Technologies Ltd., B'lore, 16th April 2013.
7. Three Days Work shop on "PIC Microcontroller", Prof. Nitin Awasthi & Team, APSIS Solutions, 22nd to 24th March 2013.
8. One day workshop on "Advancements in the field of industrial Automation" by V Srinath, AUTOMAC solutions, Bangalore, 11th Aug. 2014.
9. Two days Workshop on "Human Robot Interaction", Robofission Labs Pvt. Ltd. During 27th& 28th Sep. 2014.
10. One day technical seminar on "Industries & Building Automation", Harish Ravi, Business development manager & project Engg. 2nd March 2015.
11. Seminar on "Industrial Automation & Process Management with an overview of Embedded Systems", by H S Shivashankar, Prolific Systems, & Technologies Pvt. Ltd., Bengaluru, on 3rd May 2015.
12. Seminar on "8051 Microcontroller & its applications", by Mr. Rajesh, CEO& MD, Intel-eyes Technologies, Bengaluru, 28th April 2015.
13. Seminar on "Basics of Instrumentation & Control Systems", by N Shrivathsan&G Kiran, YOKOGAWA India Ltd., 22nd March 2015.

14. Seminar on "Career Guidance on the International Education Scene & Advantages of Research", by Sandeep S Katti, Senior Manager, Business development, CL Educate Ltd., Bengaluru on 17th Feb. 2016.
15. Workshop on "Technical Seminar on Introduction to PC Based Automation", by Mr. Krishnamurthy Kulkarni, Beckhoff Automation, B'lore, on 7th Nov. 2015.
16. Technical Seminar on "Sensors & Applications", byRayeswar Shanbhag, Senior Engineer, Beckhoff Automation, B'lore, 2nd Nov. 2015.
17. Technical Seminar on "BMDSP-A Conceptual Learning", by SanjeevKubakaddi, MD, ITIE Knowledge Solutions, B'lore, 2017.18.
18. ISTE Faculty convention on "Accreditation and NEP 2020 for excellence in higher education Institutions", 26th Nov. 2022, JSS Academy of Technical Education, Bengaluru.

Details of State Level Projects Exhibition/Paper Presentation/ Technical Fest & Students Convention organized by the dept.

1. 'SANRACHANA'-State Level Project Exhibition & Technical Paper Presentationwas organized every year to show case the exhibit the projects carried out by the final year students across the state.

2. 'ANANTHAM'-Technical Fest was conducted every year to explore the talents of the students.
3. 13th State level ISTE students' annual convention "E-Pravarthanahas-2K16" was held on 25th August 2016.This was hosted by the dept. of Electronics & Instrumentation Engg.
4. 32ndISTE Faculty convention and Dr. Chandrakanth Memorial Lecture organized on the theme of "Accreditation and NEP 2020 for excellence in higher education Institutions", 26thNov. 2022, JSS Academy of Technical Education, Bengaluru.

Seminars/Training Programmes/Workshops/ Conferences Attended: 38

Foreign Visits:

- Presented the Research paper on "Novel Algorithm for Exudate Extraction from Fundus Images of the Eye for a Content Based Image Retrieval System", 4thIEEE International Conference on Control System, Computing and Engineering (ICCSCE – 2014), Penang, Malaysia. During 28th to 30th Nov. 2014.

- Visited Technical University of Kaiserslautern, Kaiserslautern, Germany during 7thJuly to 10th July 2015 for academic discussions with the Professors and Research scholars in the area of Digital Image Processing.