




# R L JALAPPA INSTITUTE OF TECHNOLOGY

(Affiliated to Visvesvaraya Technological University, & Approved by AICTE)

Doddaballapura - 561203, Bangalore Rural District

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

<b>Faculty Name</b>	Dr.Madhu Chandra G	
<b>Designation</b>	Associate Professor	
<b>Area of Interest</b>	Digital Image and video processing, Digital communication and networking, AI &ML	
<b>Email ID</b>	madhuchandrag@rljit.in	
<b>Research Identity</b>	Google Scholar Id: <a href="https://scholar.google.com/citations?view_op=new_profile&amp;hl=en">https://scholar.google.com/citations?view_op=new_profile&amp;hl=en</a>	

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### EDUCATION:

**Ph.D:** Awarded the Ph.D degree from visvesvaraya Technological university, karnataka in the field of Digital image and video processing in the year of 2019.

### MASTER DEGREE: M.Tech

Master of Technology in Digital Communication and Networking in the year 2008 at SJCIT, Chickballapur.

### BACHELOR DEGREE: B.E (ELECTRONICS AND COMMUNICATION )

Bachelor of Engineering in Electronics and communication in the year 2006 at RLJIT,Doddaballapur.

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### TECHNICAL SKILLS:

MATLAB, Phyton, C and C++, HDL

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### PROFESSIONAL WORK EXPERIENCE:

Total Teaching Experience=13+ years

1. Currently working as Associate Professor in the Department of Electronics and communication Engineering at R.L.Jalappa Institute of Technology from March 2021.
2. Worked as Assistant Professor in the Department of Electronics and communication Engineering at R.L.Jalappa Institute of Technology from January 2012 to February 2021.
3. Worked as Senior Lecturer in the Department of Electronics and communication Engineering at R.L.Jalappa Institute of Technology from September 2011 to January 2012.
4. Worked as Lecturer in the Department of Electronics and communication Engineering at R.L.Jalappa

Institute of Technology from October 2009 to August 2011.

5. Worked as Lecturer in the Department of Electronics and communication Engineering at H.M.S Institute of Technology, Tumkur, from June 2008 to September 2009.

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**PUBLICATIONS:**

1. Published research paper entitled “**Insights to Video Analytic Modeling Approach with Future Line of Research**” in IJCA, Volume 147, Number 7, and ISBN: 973-93-80894-02-4, Aug- 2016.

**2. Published research paper entitled “Analytical Framework for Identification of Outliers for Unscripted Video”, in Vol. 14, CIC 2016 Special Issue International Journal of Computer Science and Information Security <https://sites.google.com/site/ijcsis>/ISSN: 1947-5500.**

3. Published research paper entitled “**Framework for Contextual Outlier Identification using Multivariate Analysis approach and Unsupervised Learning**”, published in International Journal of Electrical and Computer Engineering (IJECE), Vol. 8, No. 2, April 2018, pp. 1092~1101, ISSN: 2088-8708, DOI: 10.11591/ijece.v8i2.pp1092-1101.

4. Published research paper entitled “**Simplified Video Surveillance Framework for Dynamic Object Detection under Challenging Environment**”, published in International Journal of Electrical and Computer Engineering (IJECE), Vol. 9, No. 4, August 2019, pp. 2715~2724, ISSN: 2088-8708, DOI: 10.11591/ijece.v9i4.pp2715-2724.

**5. Published A paper entitled “Classification of skin lesions using deep learning and image augmentation”, published in International Journal of Mechanical Engineering, Vol. 7, No. 2, February 2022, ISSN: 0974-5823.**

6. Published A paper entitled “**Human Ear Identification System Using Shape and Structural Features Based on Sift And ANN Classifier**” published in International Journal of Health Sciences, Vol. 6, and Issue.1, March 2022, ISSN: 2550-696x. DOI:10.53730/ijhs.v6nS1.6216.

7. Published A paper entitled “**Sustainable Automated Crop Irrigation Design System Based on IOT and Machine Learning**” published in International Journal of Mechanical Engineering, Vol. 7, NO. 3 March 2022, ISSN: 0974-5823.

**INTERNATIONAL CONFERENCE:**

1. Presented a paper on “**Real Time Implementation of Tracetree in the Internet**” in international conference ICEDSP-2009 at Manipal

**2. Published research paper entitled “Simple Modeling of Mobile Foreground Detection using Probabilistic Linear Estimation Approach”, published in Silhavy R (eds) Intelligent Systems in Cybernetics and Automation Control Theory. CSOC 2018. “Springer- Advances in Intelligent**

**NATIONAL CONFERENCE:**

1. Presented a paper entitled **“Motion Detection Using Wavelet”** at NCETAR-15 organized by M.S engineering college, Bangalore on July-2015.
2. Presented a paper entitled **“Automatic System for Sports Analytics in Multi-Camera Tennis Video”** at MANTHANA-2016, organized by SJCIT, chickkaballapur on April- 2016.
3. Presented a paper entitled **“A study of various image fusion techniques”** at NCETEC-16 organized by RLJIT, Doddaballapur on April-2016.
4. Presented a paper entitled **“Energy Efficient Routing for Multihop Wireless Networks”** at NCETEC-16 organized by RLJIT, Doddaballapur on April-2016.
5. Presented a paper entitled **“Event detection of video using HOG with feature point Trajectory”** at NCDDES-15, organized by sha-shib College of engineering, Chickkaballapur on May-2016.
6. Presented a paper entitled **“Digital jewelry”** at NCRTEC-17 organized by CBIT, Kolar on May-2017.
7. Presented a paper entitled **“Advanced sericulture system based on image processing”** at NCRTEC-17 organized by CBIT, Kolar on May-2017.
8. Presented a paper entitled **“Automatic plant disease detection using Digital image processing”** at NCRTEST-19 organized by CBIT, Kolar on May-2019.
9. Presented a paper entitled **“Digital image processing based note to coin converter”** at NCRTEST-19 organized by CBIT, Kolar on May-2019.

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**BOOK CHAPTERS:**

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**TEXT BOOK AUTHORED:**

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**PATENTS:**

1. **“A system and method for enabling a walker enhancement apparatus” published in patent office journal no.33/2021 on 13/8/2021.**
2. **“A system and method for enabling a Foot tracing system” published in patent office journal no.33/2021on 13/8/2021.**

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**FUNDED PROJECTS:**

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**INVITED TALKS:**

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**FDP/WORKSHOP ATTENDED:**

1. Attended one day workshop on “**Advanced communication and Microstrip antennas**” organized by department of ECE, NHCE Bangalore in association with IETE Bangalore chapter on 7<sup>th</sup> February 2009.
2. Attended one day workshop on “**Advanced communication and Microstrip Antennas**” organized by department of ECE, HMSIT Tumkur on 6<sup>th</sup> march 2009.
3. Attended one day workshop on “**Advances in wireless communication networks**” organized by Department of Electronics & Communication R.L.J.I.T, Doddaballapur, on 30<sup>th</sup> April 2010.
4. Attended three day faculty development Programme on “**Emerging Trends and Technologies in RF Design**” conducted by AMC Engineering College, Bangalore during 17<sup>th</sup> -19<sup>th</sup>, Jan 2011, Sponsored by VTU, VGST government of Karnataka.
5. Attended one day workshop on “**Image Processing**” organized by department of ECE, ACE Bangalore on 21<sup>st</sup> April 2012.
6. Attended three day faculty development Programme on “**Research Process, Technical Paper Writing and Patenting**” conducted by R and D center, M S Engineering College, Bangalore during 22-24<sup>th</sup>, Jan2014, Sponsored by ISRO and DRDO.
7. Attended Three-day workshop on “**Research Methodologies and Latex** “on 29<sup>th</sup> to 31<sup>st</sup> December, 2014, organized by VTU e-Learning Centre, Mysore, at Vidya Vikas institute of engineering and Technology, Mysore.
8. Attended one day workshop on “**Signal Processing and its Applications**” organized by Department of ECE, VVIT, Bangalore on 13<sup>th</sup>, March 2015.
9. Attended Two day workshop on “**Plagiarism**” on 16<sup>th</sup> &17<sup>th</sup> October, 2015, organized by VTU e-Learning Centre, Mysore, at VTU regional office, Bangalore.
10. Attended Four days VTU VGST faculty development Programme on “**Big Data Analysis**” from 8<sup>th</sup> June to 11<sup>th</sup> June, 2015, organized by department of MCA, VTU, CPGS Bengaluru.
11. Attended two day workshop on “**MATLAB Primer**” organized by Department of ECE, RLJIT, Doddaballapur in association with IETE- Bangalore center on 10-11<sup>th</sup>, March 2016.
12. Attended Three-day workshop on “**Research Design and Statistical Analysis Using SPSS**” on 25<sup>th</sup> &27<sup>th</sup> August, 2016, organized by VTU e-Learning Centre, Mysore, at VTU regional Centre, Mysore.
13. Attended three days faculty development Programme on “**Computer network lab**” organized Dept. of ECE, DON BOSCO institute of technology, Bangalore during 8<sup>th</sup> -10<sup>th</sup>, Jan 2018,
14. Attended one day workshop on “**Basic electrical engineering laboratory**” organized by Department of ECE, on 27<sup>th</sup> august 2018.
15. Attended one week training Programme for teachers on “**Effective Teaching Techniques in Digital Signal Processing**”, organized by VTU HRDC for PG studies, muddenahalli, on 26<sup>th</sup> -30<sup>th</sup> August 2019.
16. Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on “**Trends In MEMS & Nanotechnology**” from 07/12/2021 to11/12/2021 at Alvas Institute of Engineering & Technology.
17. Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on “**Precision Agriculture and Nanotechnology: Making Agriculture Future Ready**” from 20/01/2022 to 24/01/2022 at Noida Institute of Engineering and Technology.

18. Attended VGST sponsored 4 days faculty development program on **“pathological speech signal processing- challenges, opportunities and future direction”** from 2<sup>nd</sup> march 2022 to 5<sup>th</sup> march 2022 organized by GSSS institute of Engineering and technology for women mysuru.

19. Attended 5 days faculty development program on **“fundamentals & application of Basic signal processing”** from 18th oct-2022 to 22 nd oct-2022 organized by SJCIT, chickballapur

**Seminars/Workshops attended:**

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**CONFERENCE/FDP/WORKSHOP CONDUCTED:**

1. Acted as A Coordinator for Conducting National and International Conferences

1. Acted as A Coordinator for conducting workshops.

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**UNIVERSITY RESPONSIBILITIES:**

1. Paper setter, Valuator, DCS, Moderator for different theory Exams of VTU and other Autonomous institutions.

2. M. Tech viva-voce Conduction of VTU and other Autonomous institutions.

3. Recognized research guide for VTU

4. Internal and External Lab Examiner

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**OTHER RESPONSIBILITIES:**

COLLEGE LEVEL:

DEPARTMENT LEVEL:

1. Working for NAAC criteria 5 coordinator at department level.

2. Project Coordinator for Department of ECE for 3 Years.

3. Test Coordinator

4. Class Coordinator

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**PROFESSIONAL MEMBERSHIPS:**

1. The Institution of Electronics and Telecommunication Engineering (MIETE), Membership **Number: M-237655.**

2. Institution of Engineers (India) MIE, Membership Number: **M-154069-0.**

3. Institute of Electrical and Electronics Engineers (IEEE). Membership Number: **M-94031259**

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**HONORS/AWARDS:**

1. Received state level award from challengers youth forum for overall achievements.

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**OTHER SIGNIFICANT ACHIEVEMENTS (if any):**

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**CONTACT DETAILS:**

**Dr. MADHU CHANDRA.G**

Sri Veerabadrswamy Nilaya

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