



# K.V.G. COLLEGE OF ENGINEERING

Kurunjibhag, Sullia, D.K.-574 327, Karnataka, INDIA

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Department of Electronics and Communication Engineering

## FACULTY PROFILE

<b>Name of the Faculty</b>	Dr. Bhagya H.K	
<b>Designation</b>	Professor	
<b>Contact Numbers</b>	Office: 08257- 235150 Mobile: +91 - 9482622635	
<b>E-mail ID</b>	bhagyahk74@gmail.com	

### • Educational Qualification

Degree	Specialization	Year of Passing	College & University
M.Sc	Electronics	1998	HemaGangothri, Hassan, Mysore University.
M. Tech	Computer Cognition & Technology	2008	Manasa Gangothri , Mysore. Mysore University.
Ph.D.	Video Processing	2022	K.V.G.C.E, Sullia, VTU, Belagavi.

### • Work Experience

Teaching	Research	Industry
24+Experience	7+Experience	-----

### • Date of Joining to the College

7<sup>th</sup> September 1998

**• In-House Experience**

Designation	Duration		Department
	From	To	
Lecturer	07-09-1998	01-02-2009	E & C
Asst. Professor	02-02-2009	26-02-2012	E & C
Associate Professor	27-02-2012	5-06-2022	E & C
Professor	06-06-02022	Till the date	E & C

**• Area of Interest**

Image and Video processing	Multimedia communication Network	Digital Signal Processing	Analog and Digital communication systems	Antenna Theory and design	Advances in digital image processing
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**• Subject Taught**

<p><b>For UG</b></p> <ol style="list-style-type: none"> <li>1.Basic Electronics</li> <li>2.Analog Electronics</li> <li>3.Digital Electronics</li> <li>4.Electronics Circuits &amp; Devices</li> <li>5.Microprocessor</li> <li>6.Advanced Microprocessor</li> <li>7. Microwave Communication</li> <li>8.Transmission lines and Waveguides</li> <li>9.Analog communication</li> <li>10.Antenna &amp; Wave propagation</li> </ol>	<ol style="list-style-type: none"> <li>11. Satellite Communication</li> <li>12. Microcontroller &amp; Application,</li> <li>13. Operation research &amp; Management</li> <li>14. Image Processing</li> <li>15. Principles of communication Systems</li> <li>16. Microwave &amp; Antennas</li> </ol>	<p><b>For PG</b></p> <ol style="list-style-type: none"> <li>1.Embedded System Design</li> <li>2.Antenna Theory &amp; Design</li> <li>3.Wireless &amp; Mobile networks</li> <li>4.Multimedia &amp; Communication Networks</li> <li>5.Advances digital image processing</li> <li>6. Multimedia Over Communication Link</li> </ol>
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**• Membership in Professional Bodies/University Bodies/Organizations**

– Member of Indian Society for Technical Education (MISTE) : LM – 32282 (2001)

**• Publications**

National / International Journals	National / International Conferences
05	14

## • Publications : International Journals

1. Bhagya H.K and Dr. Keshaveni N , “*Review on Video Enhancement Techniques*” International Journal of Engineering Science invention Research & Technology, 23<sup>rd</sup> August 2016
2. Bhagya H.K and Dr. Keshaveni N , “*Contrast Enhancement Techniques for foggy Videos*” International Journal of Graphics and Multimedia(IJGM) ,International Journal of Graphics and Multimedia, Vol.9,Issue 1,pp.1-11, 2019.(UGC- Approved)
3. Bhagya H.K and Dr. Keshaveni N , “*Video Enhancement using Histogram Equalization with JND Model*” International Journal of Recent Technology and Engineering (IJRTE), Volume 8, Issue2. pp. 2506-2511, July 2019. (Scopus Indexed)
4. Bhagya H.K & Keshaveni N, “*Enhancement on Edge and Reduction of Noise in Low Light Videos using Discrete Wavelet Transform with JND Model*”, International Journal of Solid State Technology, vol. 63, no.6, Nov. 2020. (Scopus Indexed)
5. Bhagya H.K & Keshaveni N, “*Contrast Enhancement Technique using Discrete Wavelet Transform with Just Noticeable Difference Model for 3D Stereoscopic Degraded Video*”, International Journal of Innovative Technology and Exploring Engineering (IJITEE), vol.10 no.3, Jan. 2021. (Scopus Indexed)

## • Publications : National / International Conferences

1. Image compression Techniques, “*Recent Trends in emerging Technologies*”, 2008.
2. A Lossless Image Compression Algorithms using fixed block size segmentation, “*Impulse 2008*”, 2008.
3. Lossless compression Algorithms for general images, “*Technovation*”, 2008.
4. Data hiding Scheme for Medical Images using Lossless Code for Mobile HIMS”, “*Advances in Computer Applications*”, 2012.
5. Motion and Based Person Tracking in Surveillance Videos, *Advances in Computer Applications*, 2012.
6. Exploring Duplicated Regions in Natural images, “*Advances in Computer Applications*”, 2012.
7. Three stage pipeline VLSI architecture for computation of 2-D DWT, “*Emerging Trends in engineering and Technology*”, 2013.
8. Fast Computation of the 2 D Discrete Wavelet Transform using Pipeline VLSI Architecture, “*Information and communication Technology*”, 2013.
9. A Novel Approach for extracting Kannada Text in image, “*Electrical, Electronics and Computer*

*Science*”,2014

10. A Novel Approach for Partial Encryption for Video Encoding, “*NCEEE*”,2014
11. Smart Selective encryption for H.264/AVC Videos, “*Advances in Electronics and Communication*” ,2014
12. An effective encryption of CAVLC for H.264/AVC Video, “*Electrical and Electronics Engineering*”, 2014.
13. Satellite Image Enhancement using Singular value decomposition & Tophat Filter under wavelet domain, “*National Conference on signal and image processing (NCSIP-2015)*” 2015
14. NBPC Based Contrast Enhancement techniques for Fog videos, “*International conference on Signal & Image processing (ICSIP)*”, 18th -19<sup>th</sup> August 2017.

### • Professional Activities: NPTEL Course

	Subject	Year of Certification	Result
<b>NPTEL (National Program on Technology Enhanced Learning )</b>	1. Digital Image processing (DIP) (Prof. B.N Biswas IIT Kharagpur)	Oct 2018 (12weeks. FDP)	77%
	2. Teaching and Learning in Engineering (TALE) (Prof. N J Rao, IISc, Bangalore)	March-2019 (4weeks. FDP)	76% (Silver Medal)

### • Faculty Development Programmes (FDP) Participated

SL. No.	Program Title	Venue	Date & Year
1.	Faculty Development Program	KVGCE-ISTE chapter	23-06-2001 (Two days)
2.	FEEL teacher Training program	KVGCE-ISTE chapter	16-08-2001 (3 days)
3.	FDP mission 10X	KVGCE ,Sullia	20-12-2010 (five days)
4.	Participate In Microsoft Dream Park Yatra- 2011	KVGCE ,Sullia	21-03-2011 (one day)
5.	Cognitive Machine Intelligence and Data Mining	B.N.M.I.T Bangalore.	30/01/2012 (Three days)

• **Workshops / Short-term Course Attended**

<b>SL. No.</b>	<b>Workshop Title</b>	<b>Place</b>	<b>Date &amp; Year</b>
1.	Recent Trends in communication engineering	M.C.E Hassan	12/09/2005 (3 days)
2.	Mathematical tools for engineering Applications	K.VG.C.E Sullia	13-05-2006 (one day)
3.	Microwave Integrated circuits	A.I.T Chikmagalur	28/02/2009 (one day)
4.	Opportunities for Sponsored Research & Collaboration with IT Industries	K.VG.C.E Sullia	11/12/2009 (one day)
5.	INSPIRE- The faculty Contest Series	Infosys, Bangalore	2012 (Two days)
6.	Intellectual Property & Innovation management in Knowledge era	K.VG.C.E Sullia	12.11/2013 (one day)
7.	Research Projects and Technical Paper Writing	K.VG.C.E., Sullia	25/02/2014 (one day)
8.	VISION -14	K.VG.C.E., Sullia	25/04/2014 (one day)
9.	Research Methodology & Latex Documentation	REVA University, Bangalore	09/01/2017 (Two days)
10.	Biomedical Image & Signal Processing using MATLAB	BMS Institute of Technology and Management, Bangalore	06/02/2017 (Two days)
11	TEQIP – III Sponsored STTP	NITK, Surathkal.	20/08/2018 (Five days)

• **No. of Project Guided**

<b>UG</b>	<b>PG</b>
24	18

• Responsibilities Taken in College Level

Event	Positions	Duration	
		From	From
College Flying Squad for Ladies Hostel	Staff in charge for Ladies Hostel	10-08-1999	Till the date
Orientation Committee	Member	1-09-2007	6-07-2010
College Anti ragging Committee	Secretary	5-07-2010	Till the date
Advisory Committee	Member	3-09-2009	5-07-2010
Infosys soft skills Committee	Member	7-09-2010	10-04-13
In charge for ladies hostel	Faculty advisor for ladies students	2-02-2009	05-06-2022
Women Grievance Redressal cell	Chairman	2015	Till the date
College Internal Complaint Committee	Chairman	14/03/2018	Till the date
Student Grievance Redressal cell	Member	2015	Till the date
Reception Committee of KVG Science Talent Hunt	Member	15-12-2018	Till the date
NBA	Coordinator for Criteria -5	2018	Till the date
Hostels	Dean of Hostel	06-06-2022	Till the date
Discipline committee	Member	08-06-2022	Till the date

• Responsibilities Taken in Department Level

Event	Role	Duration	
		From	To
1.ENCEA	Staff Advisor	2000	2002
2.Seminar	Co-ordinator	2002	2003
3.Library	Co-ordinator	2007	2010

4.Test	Co-ordinator	2007	2009
5.Mini project	Co-ordinator	2008	2009
6.E- congregation	Chair person	2009	2010
7.Seminar	Co-ordinator	2010	2013
8.Analog communication Lab	In charge	2012	2017
9.Mini Project for III EC	Guide	2011	Till the date
10.Internship for VII EC	Guide	2018	Till the date
11. M.Tech (DE&C)	PG- Coordinator	2021	Till the date

- Participation details in the college level activities

SL .No.	Event	Position / Role
1.	College day function	Decoration Committee
2.	College day Sports function	Member
3.	Ayudha pooja celebration	Reception Committee
4.	College day function	Discipline Committee
5.	Talent Hunt Program	Coordinator for Reception committee

- Participation details in the Department level activities

SL .No.	Event	Role / Responsibilities
1.	ENCEA activities	Judges for cultural activities
2.	ENCEA -09	Chairman of Invitation Committee
3.	ENCEA activities	Judges for technical paper presentation
4.	e-congregation -9 to 12	Member of screening Committee
5.	ENCEA inaugural function 6 <sup>th</sup> Oct 2009	Chairman of Abhivyakthi Committee
6.	Counseling	Counselor for EC Students
7.	UG- Admission	Co-ordinator
8.	PG- Admission	Co-ordinator

9.	KVG Scholar ship Test	Co-ordinator
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**• No. of Lab Manual / Program Guidelines Prepared**

SL. No.	Lab manual / Guide lines Title	Semester and branch	Year
1.	Analog Electronics Lab Manual	III E&C	2000
2.	Microprocessor Lab	V E&C	2003
3.	Digital Electronics Lab Manual	IV E&C	2002
4.	Communication Lab	V E&C	2006
5.	Digital electronics Lab Manual	III E&C	2009
6.	Analog communication +LIC Lab Manual	IV E&C	2012
7.	communication Laboratory	VI E&C	2022

**• No. of Labs handled for UG and PG**

SL. No.	Lab Title	Year	Semester & Branch
1.	Analog Electronics Lab	1998	III E&C
2.	Analog Electronics Lab	1999	III E&C
3.	Analog Electronics Lab	2000	III E&C
4.	Digital Electronics Lab	2002	III E&C
5.	Digital Electronics Lab	2003	III E&C
6.	Microprocessor Lab	2004	V E&C
7.	Communication Lab	2007	V E&C
8.	Communication Lab	2008	V E&C
9.	Microcontroller & VLSI Lab	2009	VII E&C
10.	Advanced Communication Lab	2009	VI E&C
11.	Digital signal Processing	2010	V E&C
12.	Microcontroller Lab	2011	IV E&C
13.	Analog communication +LIC Lab	2012	V E&C
14.	Analog communication +LIC Lab	2013	V E&C



15.	Analog Electronics Lab	2017	III E&C
16.	Digital Electronics Lab	2017	III E&C
17.	Digital signal Processing	2018	V E&C
18.	Lab-I	2018	I Sem M.Tech DEC
19.	Lab- II	2019	II Sem M.Tech DEC
20.	Analog devices and Instrumentation	2019	III E&C
21.	Digital signal Processing	2019	V E&C
22.	Advanced communication Lab	2021	VII E&C
23.	Advance Digital signal Processing Lab	2022	I Sem M.Tech DEC
24.	Communication Laboratory	2022	VI E&C

#### • Interaction with Outside World / Invited Lectures

Sl.No.	Program	Venue and Organizer	Date
1.	HIV/ AIDS Awareness Programme	K.V.G.M.C., Sullia.	15-11-2002 (Three days)
2.	Member of panel of judges for Srishti 2012	Sahyadri College of engineering.	12/05/2012 (Two days)

#### • Awards / Recognition / Achievements/ Others

- Served/Serving as **Question Paper setter and Moderator** for UG and PG program for VTU and other reputed autonomous institutes and Universities like NMAMIT @ Nitte, MIT@Manipal .

**Dr. Bhagya H.K, Associate Prof. E &C DEPT., KVGCE, SULLIA, D.K - 574 327**