



# K.V.G. COLLEGE OF ENGINEERING

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

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## Department of Computer Science and Engineering

### FACULTY PROFILE

Name of the Faculty	SAVITHA C. K	
Designation	Associate Professor	
Contact Numbers	Office: 08257235147 Mobile: 9481918269	
E-mail ID	cksavithaharish@gmail.com	

#### • Educational Qualification

Degree	Specialization	Year of Passing	College & University
B. E	Electrical and Electronics Engineering	2004	KVGCE, VTU
M. Tech	Computer Science and Engineering	2009	NMAMIT, Nitte, VTU
Ph.D.	Digital image processing, Machine Learning	2020	KVGCE, VTU

#### • Work Experience

Teaching	Research	Industry
17 Years 9 Months	5 Years	----

#### • Date of Joining to this College

23<sup>rd</sup> August 2004

#### • In-House Experience

Designation	Duration		Department
	From	To	
Lecturer	23-08-2004	31-7-2010	E&EE,
Asst. Professor	1-8-2010	2-3-2012	CS&E
Assoc. Professor	3-3-2012	13-09-2021	CS&E

Professor	14-09-2021	22-04-2022	CS&E
• Area of Interest			
Artificial Intelligence & Machine Learning	Digital Image Processing	Data Mining	Pattern recognition
• Subject Taught			
UG		PG	
<ul style="list-style-type: none"><li>– Data Mining and Data Warehousing</li><li>– Unix And Shell Programming</li><li>– Logic Design</li><li>– AI &amp; Machine Learning</li></ul>	<ul style="list-style-type: none"><li>– Digital Image Processing</li><li>– Computer Organization</li><li>– Compiler Design</li><li>– Software Testing</li><li>– Computer Concepts and C</li><li>– Database Management System</li><li>– Discrete Mathematical Structures</li></ul>	<ul style="list-style-type: none"><li>– AI &amp; Machine Learning</li><li>– Big Data Analysis</li><li>– Advanced Operating System</li><li>– Wireless Sensor Networks</li><li>– Cloud computing</li></ul>	
• Membership in Professional Bodies/University Bodies/Organizations			
<ul style="list-style-type: none"><li>– Member of Indian Society for Technical Education (MISTE): LM -77896</li><li>– CSI</li></ul>			

<b>• Publications</b>	
National / International Journals	National / International Conferences
23	11
<b>• Publications: International Journals</b>	
<ol style="list-style-type: none"> <li>1. <i>"Impact of an Artificial Intelligence in Natural Language Interface to Database", Indian Journal of Natural Sciences, Vol.13 / Issue 71 / April / 2022</i></li> <li>2. <i>"Ensemble Learning Regression Models for Fatigue Life Estimation", Indian Journal of Natural Sciences, Vol.13 / Issue 71 / April / 2022</i></li> <li>3. <i>"Semantic Segmentation for Arecanut Classification using Support Vector Machine", International Journal of Innovative Research in Computer and Communication Engineering ,Volume 10, Issue 2, February 2022, DOI: 10.15680/IJIRCCE.2022.1002039</i></li> <li>4. <i>"Detection of Single and Multi-character Tulu Text Blocks" , 2021 IEEE International Conference on Mobile Networks and Wireless Communications (ICMNBC),</i></li> <li>5. <i>"Segmentation and recognition of characters on Tulu palm leaf manuscripts", Int. J. Computational Vision and Robotics, Vol. 9, No.5, pp.438-457, 2019</i></li> <li>6. <i>"Machine Learning Approaches for recognition of offline Tulu Handwritten Scripts", Journal of Physics:</i></li> </ol>	

7. *"PNN and Deep Learning Based Character Recognition System for Tulu Manuscripts"*, International Journal of Engineering and Advanced Technology, Blue Eyes Intelligence Engineering & Sciences Publication (BEIESP), Vol 8, No 5, Jun 2019, pp 1854-1861.
8. *"A framework for recognition of handwritten south Dravidian Tulu script"*, 2016 IEEE Conference on Advances in Signal Processing (CASP), IEEE, Jun 2016, pp 7-12.
9. *"Haar features based handwritten character recognition system for Tulu script"*, 2016 IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT), IEEE, May 2016, pp 65-68.
10. *"Efficient Binarization Technique for Handwritten Archive of South Dravidian Tulu Script"*, International Conference on Emerging Research in Computing, Information, Communication and Applications (ERCICA). Springer Singapore, Nov 2017, pp 651-666.
11. *"Secured Hadoop environment"* International Research journal of engineering and technology, June-2018, Volume 5, Issue.06.
12. *"A simplified model of natural language interface for querying database"*, International Research journal of engineering and technology, May 2018, Volume 5, Issue.05.
13. *"An automatic system to detect and counting malaria parasite cells using mat lab"*, International Research journal of engineering and technology, May 2018, Volume 5, Issue.05.
14. *"A Super isolating computation for the medical CT picture enhancement"*, International Research journal of engineering and technology, May 2018, Volume 5, Issue.05.
15. *"Hybrid HMM/ANN models for improving offline handwritten text recognition"*, Journal of image processing and pattern recognition progress, STM Journals, Vol 3, No 3, 16-23p., Issn: 2394-1995.
16. *"Ranking of image search by click based uniformity and Typicality"*, Journal of image processing and pattern recognition progress, STM Journals, 2016, Vol 3, No 3, 39-46p, Issn: 2394-1995.
17. *"Information privacy and security in data mining"*, Journal of Advances Database Management & System, Stm Journals, Dec 2016, Volume 3, Issue 3, Eissn: 2393-8730.
18. *"Data security using cloud computing adaptation framework"*, Journal of computer technology and application, Dec 2016, Volume 7, Issue 3, Eissn: 2229-6964, Issn: 2347-7229
19. *"Analysis of Personalized Queries in a Mobile Search Engine"*, International Journal of Science, Engineering and Technology Research (IJSETR), May 2014, Volume 3, Issue 5.
20. *"FPGA: Implementation of Association Rule in Web Usage Mining"*, International journal of

Engineering Research and Technology, April 2014, Volume 3, Issue.04.

21. *"The Impacts of social networking and Its analysis"*, International journal of modern Engineering Research, Volume 3, Issue 4, Jul-Aug 2013 pp-2469-2471.
22. *"A review on brain disorder segmentation in MR Images"*, International journal of modern Engineering Research, Volume 3, Issue 4, Jul-Aug 2013, pp-2469-2471.
23. *"Multiple Sclerosis lesion classification on MRI using ANN"*, International journal of computer Engineering and Information Technology, Jan 2009, Volume 1, No 1.

#### • Publications: National / International Conferences

1. *"Impact of an Artificial Intelligence in Natural Language Interface to Database"*, IEEE International Conference on Science and technology computational intelligence , held on 15<sup>th</sup> and 16<sup>th</sup> March, 2022, at Kristu Jayanthi college , Bengaluru.
2. *"Detection of single and multi-character Tulu text blocks"*, 2021 IEEE International Conference on Mobile Networks and Wireless Communications (ICMNWC), held on 03-04 December 2021, at Sri Siddhartha Institute of Technology, Tumakur.
3. *"Haar And SIFT Feature Learning Based Classifiers In Character Recognition Task"* in International Conference on Emerging Trends in Science and Technology (ETIST 2021) Jointly Organized by Department of Biological Science, Physical Science and Computational Science Nallamuthu Gounder Mahalingam College, Affiliated to Bharathiar University, Tamilnadu, India, Published by NGMC - November 2021
4. *"A framework for recognition of handwritten south Dravidian Tulu script"* in *IEEE international Conference on Advances in Signal Processing (CASP)* held on June 9<sup>th</sup>, 2016 at Pune.
5. *"Haar features based handwritten character recognition system for Tulu script"* in 2016 IEEE *International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT)* held on 20<sup>th</sup> May, 2016 at Bangalore.
6. *"Efficient Binarization Technique for Handwritten Archive of South Dravidian Tulu Script"* in

*Emerging Research in Computing, Information, Communication and Applications (ERCICA 2016)* held on 29<sup>th</sup> July, 2016 at Bangalore.

7. "A simple handwritten character recognition system for Malayalam", *International conference on Emerging trends in engineering and technology* at Alappuzha held on 23<sup>rd</sup> August 2015
8. "Implementation of Association Rule in Web Usage Mining", *Technoarete, International Conference*, Bengaluru, 2014.
9. "Machine Learning Approaches for recognition of offline Tulu Handwritten Scripts", *NCCI-2018*, 5<sup>th</sup> Dec 2018
10. "Automated classification of multiple sclerosis lesion using wavelet and texture based NN tool", *National conference on advanced IT, Engineering and management*, 5,6<sup>th</sup> September 2013.
11. "Multiple sclerosis lesion classification on MRI using ANN", *National conference on Research challenges in computation and information technology*, 10<sup>th</sup> March 2009.

#### • Professional Activities:

NPTEL Course (National Program on Technology Enhanced Learning )	Subject	Year of Certification	Result
	Data mining	July 2019 (8 weeks)	Elite (85%) (Topper)
Reviewer	IEEE International Conference on Distributed Computing and Electrical circuits and Electronics(ICDCECE- 2022), bitm, BALLARI	2022	

#### • Faculty Development Programmes (FDP) Participated

SL. No.	Program Title	Venue	Date & Year
1.	Artificial Intelligence and machine learning	Sri Madhwa Vdiraja Institute of technology and management	28-10-2021 to 1- 11-2021
2.	ATAL FDP on Data science in IOT	Kalinga Institute of Industrial technology	21-6-2021 to 25-6- 2021

3.	ATAL FDP on Emerging trends in the field of AI & ML	Institute of engineering and management	14-6-2021 to 18-06-2021
4.	Machine learning using python programming	AJIET, Mangaluru	1-6-2021 to 5-6-2021
5.	Recent trends in Biomedical Application	Karunya Institute of technology and sciences	13 <sup>th</sup> July-17 <sup>th</sup> July,2020
6.	Deep learning and natural language processing using modern tools	BIT, Bengaluru	21 <sup>st</sup> to 25 <sup>th</sup> July 2020
7.	Mobile Application Development Fundamentals	KVGCE, Sullia	22 <sup>nd</sup> & 23 <sup>rd</sup> Feb 2018 (Two days)
8.	Machine learning and applications	JNNCE, Shivamogga	22 <sup>nd</sup> to 26 <sup>th</sup> January,2018 (Five days)
9.	Big data and machine learning	NITK, Surathkal, Mangalore	21 <sup>st</sup> to 23 <sup>rd</sup> , Feb 2014 (Three days)
10.	Advanced trends in Image processing and its applications	R.V. college of Engineering, Bangalore	18 <sup>th</sup> to 20 <sup>th</sup> July, 2013 (Three days)
11.	Cloud computing: Perspective and challenge	Srinivas Institute of technology	8 <sup>th</sup> Feb 2013 (One day)
12.	Intellectual Property and Innovation Management in Knowledge Era	KVGCE Sullia	12 <sup>th</sup> Nov, 2013 (One day)
13.	State of Art Approached to Power System Modeling and Simulation Techniques of Low Power VLSI Design	NMAMIT, Nitte	2007
14.	Mathematical Tools for Engineering Application	KVGCE	2006

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

SL. No.	Workshop /Webinar/Certification Course Title	Place	Date & Year
	Introduction to Artificial Intelligence	Infosys, Springboard	06-06-2022

1.	Digital teaching techniques	ICT ACADEMY	05 <sup>th</sup> Jan-09 <sup>th</sup> Jan 2021
2.	Network Emulation using Linux namespaces and NeST	NMAMIT,Nitte	16 <sup>th</sup> July 2020
3.	Teaching Pedagogy	ATME college of Engineering, Mysuru	17 <sup>th</sup> July 2020
4.	Technology for 5G	SIT,Tumikauru	16 <sup>th</sup> July 2020
5.	Nano Technology and its applications	Alva's Institute of engineering and technology	<b>16<sup>th</sup> July 2020</b>
6.	Artificial Intelligence and Robotic process automation in action	SIT, TUMAKUR	13 <sup>TH</sup> JULY 2020
7.	Object oriented analysis and design using UML with essential of rational software architect	KVGCE	2012
8.	Certificate of Excellence	KVGCE	2009
9.	Information Management	NMAMIT, Nitte	2008

#### • No. of Project Guided

UG	PG
20	4

#### • Responsibilities Taken in College Level

Event	Positions	Duration	
		From	To
Magazine Committee	Member	2010	2011
Alumni Committee	Member	2016	2018
Women Grievance Cell Member	Secretary	2019	2021
Digital Library	Coordinator	21/09/2021	Till date

#### • Responsibilities Taken in Department Level

Event	Role	Duration	
		From	To

1. Seminar coordinator	Department Coordinator	2009	Till the date
2. N'GageIT-10	Chair Person of Proceedings and Souvenir committee	2010	-
3. KVGCE Journal CS/IS	Member of editorial board	2013	2014
4. N-Gage -IT 15	Registration committee	2015	
5. CENSA	Treasurer	2015	Till date
6. N- Gage 16	Scrutinizing Committee	2016	-
7. N- Gage 17	Programming Committee	2017	-
8. N- Gage 18	Scrutinizing Committee	2018	-
9. N- Gage 19	Scrutinizing Committee	2019	-

• Participation details in the college level event.

SL. No.	Event	Position / Role
1.	Founders day celebration games and sports meet	Participated in Tug of war
2.	V8-Cricket match	Participation in staff team

• Participation details in the Department level activities

SL. No.	Event	Role / Responsibilities
1.	Cooking without fire (Organized by CENSA) 2017	Judge
2.	N- Gage 19, Technical Skit	Judge

• No. of Lab Manual / Program Guidelines Prepared

SL. No.	Lab manual / Guide lines Title	Semester and branch	Year
1.	Electronic Circuits and Logic Design Lab	3 <sup>rd</sup> CS&E/ISE	2011-12
2.	Data Structures and Applications Lab	3 <sup>rd</sup> CS&E (2017 scheme)	2018-19
3.	AI and Machine learning Lab Manual	7 <sup>th</sup> CS&E (2018 scheme)	2021-22



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

SL. No.	Lab Title	Year	Semester & Branch
1.	AI & Machine learning lab	2021	VII CS
2.	Machine learning lab	2019	VI CS 'A','B'
3.	Data Structures Lab	2018	III 'A'
4.	Design and Analysis of Algorithms Lab	2017-18	IV 'B'
5.	Network Lab	2017-18	VII 'A'
6.	DBMS Lab with Mini Project	2017-18	V 'A'
7.	Unix System Programming and Compiler Design Lab	2016,2017	VI CS
8.	System Software And Operating System Lab	2015, 2016	V 'A'
9.	System Software And Operating System Lab	2015-16	V CS 'A'
10.	Microprocessor Lab	2015	IV 'B'
11.	System Software And Operating System Lab	2014-15	V
12.	Unix System Programming and Compiler Design Lab	2014	VI
13.	Electronic Circuits and Logic Design Lab	2009,2012,2013,2014	III
14.	Microprocessor Lab	2010, 2013	IV
15.	C Programming Lab	2011	I D

• **Interaction with Outside World**

Sl. No.	Responsibility	Event and Organizer	Date
1.	Judge	Project Exhibition (Sahyadri College of Engineering)	2017
2.	Resource Person	Technical Talk on Artificial Intelligence and its applications(Nehru Memorial Pre-University College ,Aranthod	15/1/2022

**PROF. SAVITHA C.K., CSE DEPT., KVGCE, SULLIA, D.K-574327**

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