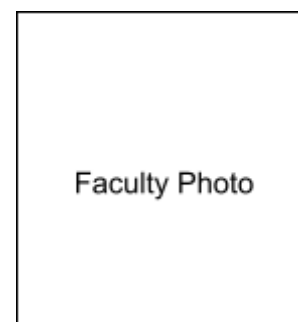# Faculty Profile

Brief Profile (Few Paragraphs)

Faculty Photo

Dr. Krishnappa H K is Working as Professor in the department of computer science and Engineering (CSE) at R.V College of Engineering(RVCE) ,Bengaluru, Karnataka, India. He has 26 years of teaching experiences. His specialization includes Graph Theory, Computer Graphics and Image processing. He has published research papers in reputed journals and conferences. He is reviewer for the various research papers submitted to IEEE International Conferences organized by IEEE and Journals.

Personal Information

- **Name:** Dr Krishnappa H K
- **Designation:** Professor
- **Department:** Computer Science and Engineering
- **Email:** krishnappahk@rvce.edu.in
- **Phone:** 9902363643

Domain of Expertise

Research Focus

- **Primary Area:** Theoretical computer science
- **Allied Areas:**
    - Graph theory and combinatorics.
    - Discrete mathematical structures.

Academic Qualifications

- **Ph.D.**: CSE, VTU,2014
- **M.Tech/M.E**: CSE, Bangalore University, 1999
- **B.E./B.Tech**: CSE, Bangalore University, 1996

Professional Experience

S.No	Institute/College/Industry	Job Title	Duration (From- To)

Experience

S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.	RVCE	Lecturer	Nov-99 to July-2005
2.	RVCE	Senior Lecturer	July-2005 to July-2006
3.	RVCE	Assistant Professor	July-2006 to Oct-2008
4.	RVCE	Assistant Professor	July-2006 to July-2014
5.	RVCE	Associate Professor	July-2014 to Dec-2024
6.	RVCE	Professor	Dec-2024 till date

Publications & Patents

1. **Krishnappa.H.K.,K.Kishore. andV.Ch.Venkaiah,***"Vertex Magic Total Labeling of Complete Graphics"*-Presented in International Conference Jointly Organized by KalasalingamUniversity, Madurai and University of Newcastle, Australia on 10-01-2009.

2. **Krishnappa.H.K.,** *"Graphics programming with OPEN-GL"*-Presented in a Workshop Organized by RNSIT, Bangalore on 11-03-2009.

3. **Krishnappa.H.K.,K.Kishore. and V.Ch.Venkaiah,***"Vertex Magic Total Labeling ofComplete Graphics"*AKCE Journal of Graphs and Combin, 6, No.1(2009)pp.143-154.

4. **Krishnappa.H.K., N.K.Srinath, and P.Ramakanth Kumar,***"Vertex Magic TotalLabeling ofComplete Graphics"* International Journal of Computer, Mathematical Sciences and Applications Vol.4, Nos.1-2, Jan-July 2010, pp 157-169.

5.**Krishnappa.H.K., N.K.Srinath, and P.Ramakanth Kumar,***"Magic Square Construction Algorithms and Their Applications"*, The IUP Journal of Computational Mathematics, Vol 3., No.3, 2010.

6. **Krishnappa.H.K.,Panduranga.H.B.,** "Application of Graph Coloring for secured Message transfer", National Conference on FCS-2011.

7. **Krishnappa.H.K., Srinath N.K., Ramakanth Kumar P., Manjunath S.,** *"Algorithms to construct Edge magic Total Labeling of Complete Bipartite graphs" Presented in ICCSIT at Tirupathi,(June-2012).*

8. **H. K. Krishnappa, N.K. Srinath, S. Manjunath., "**Algorithms to Realize All Possible Vertex Magic Total Labeling and Super Vertex Magic Total Labeling Of Complete Graphs", International Journal of Engineering and Innovative Technology (IJEIT) Volume 2, Issue 9, March 2013, Pg.65-70.

9. **H. K. Krishnappa, N.K. Srinath, S. Manjunath., "**Vertex Magic Total Labeling of Complete Graphs and their application for Public-Key Cryptosystem", International Journal of Innovative Research in Computer and Communication Engineering Vol. 1, Issue 2, April 2013, Pg. 379-387.

10. **H. K. Krishnappa, N.K. Srinath, S. Manjunath., "**Algorithms to Construct Anti Magic Labeling of Complete Graphs", International Journal of Computer and Information Technology (ISSN: 2279 – 0764) Volume 02– Issue 03, May 2013, Pg. 492-499.

11. **Sharath Kumar K.C. , H.K.Krishnappa., "**Development of High Availability Framework for the chassis of Advanced TCA (ATCA) in CDMA Networks", International Journal of Advanced Research in Computer Engineering and Technology (IJARCET) Volume 2, Issue 6, June 2013, Pg. 2068-2072.

12. **Yashaswini Y K, H K Krishnappa** "Design of Scalable & Simple SIP Application Development & Execution Platform", IJRIT International Journal of Research in Information Technology, Volume 1, Issue 6, June 10, 2013, Pg. 37-45

13. **Bhavana. V, Dr. Krishnappa. H K,** "Multi- Modality Medical Image Fusion – A Survey", Published in International Journal of Engineering Research & Technology (IJERT), Volume 4, Issue 02, February – 2015, pp. 778 – 781.

14. **Bhavana. V, Krishnappa. H K,** "Wavelet Transform Based Multi- Modality Medical Image Fusion", Presented in National Conference on " Real - Time Systems" – NCRTS – 2015, held during 14th and 15th May 2015 at CEC, Bangalore, Organized by Department of CSE & ISE.

15. **Dr. Krishnappa. H. K. ,Kavya A, "**Review on Residual energy based routing to increase energy efficiency in wireless Adhoc networks**"** Published in International Journal of Innovative Technologyand Research (IJITR), Volume 3Issue 03, May – 2015, pp. 2157 – 2160.

16. **Bhavana.V, Krishnappa H.K, J. Naveen Chandra, "Brain Tumor Detection using Threshold and Watershed Segmentation Techniques with Isotropic and Anisotropic Filters ", 7th IEEE International Conference on Communication & Signal Processing, ICCSP 2018,April 2018. [SCOPUS INDEXED]**

17. **Bhavana.V, Krishnappa H.K, Digvijay Reddy, Dheeraj, Kiran, "Brain Tumor Detection using Image Segmentation Techniques ", 7th IEEE International Conference on Communication & Signal Processing, ICCSP 2018,April 2018. [SCOPUS INDEXED]**
18. **Deepika Ravi, Krishnappa H K, "A Survey on industrial process automation using Robots", "National Conference on Knowledge Dissemination of PG and Research works", Organized by RVCE on 7th to 8th May 2018.**

19. **Mahalakshmi s, Krishnappa H K, Jayadevappa D, "A Hybrid Approach for the Segmentation of Brain Tumor using K-means Clustering and Variational level Set", "Journal of Advanced Research in Dynamical and Control Systems" ISSN: 1943-023X, April-2018.**

20. Srinivasa D B, Krishnappa H K., " A novel task scheduling scheme for Computational Grids-Greedy approach", "The 32nd IEEE International Conference on Advanced Information Networking and Application", AINA, June-2018.

21. Mahalakshmi s, Krishnappa H K, Jayadevappa D, "Region Based Active Contours Model with Contourlet Transform for Segmentation of Brain Tumor from MR images", "Biomedical and Pharmacology Journal', Accepted for publication.

22. D B Srinivas, H K Krishnappa, Rajan M A, Sujay N. Hegde, "REAL-TIME ADAPTIVE ENERGY-SCHEDULING ALGORITHM FOR VIRTUALIZED CLOUD COMPUTING" , International Journal of Distributed and Parallel Systems (IJDPS) Vol.10, No.1, DOI:10.5121/ijdps.2019.1010 , pages 1-14, Jan-2019.

23. Mahalakshmi, Krishnappa, H.K., Jayadevappa, D., "Region based active contours model with contour let transform for segmentation of brain tumor from MR images ", Journal of International Pharmaceutical Research, Jan-2019. [**SCOPUS INDEXED**].

24. Bhavana.V, Krishnappa H.K, Pournami Prasad,Surekha Subramani, "Medical Image Fusion Techniques Using Discrete Wavelet Transform", International Conference on Computing Methodologies and Communication, ICCMC 2019.
[**SCOPUS INDEXED**] [**Presented in March 2019**].

25. Bhavana.V, Krishnappa H.K, K Sai Ashish Reddy,K Kalyan Kumar,K Naveen Kumar, "Multimodal Medical Image Fusion Enhancement Technique for Clinical Diagnosis", International Conference on Computing Methodologies and Communication, ICCMC 2019. [**SCOPUS INDEXED**]

26. Mahalakshmi, Krishnappa, Jayadevappa "Automated brain tumor segmentation and identification using MR images", Journal of innovative technology and exploring engineering,Oct- 2019.(Open Access and Scopus)

27. Asha K, Krishnappa H K, "Handwriting Recognition using Deep Learning based Convolutional Neural Network", International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume 8, Issue 4, pages: 4826-4828, Nov-2019. [**SCOPUS INDEXED**].

28. Keerthish C Shettar, Dr.Krishnappa H.K., "A Deep CNN approach for early detection of COVID-19 using Chest X-Ray Images", "High Technology Letters", ISSN: 1006-6748, July-2021.

29. Chethan B, Dr.Krishnappa H K., "High Performance Computing as a Service", International Journal of Scientific Research and Engineering Development", ISSN:2581-7175, Volume 4, Issue 3, July-2021.

30. Nishchal Shetty, Dr.Krishnappa H K., "A Review on Cloud Virtualization", International Journal of Scientific Research and Engineering Development", ISSN:2581-7175, Volume 4, Issue 3, July-2021.

31. Vedika Agarwal, Dr.Krishnappa H K., "Robot Framework Integration with Jenkins-A blessing for Automation", "International Research Journal of Engineering and Technology", e-ISSN: 2395-0056, p-ISSN: 2395-0072, Volume 8, June-2021.

32. Mamatha S K, Dr.Krishnappa H K "Detection of Brain Tumor in MR images using hybrid Fuzzy C-mean clustering with graph cut segmentation technique" published at "Turkish Journal of Computer and Mathematics Education Journal". (Scopus Indexed journal) DOI: https://doi.org/10.17762/turcomat.v12i10.5201Issue: Vol. 12 No. 10 (2021)

33. Asha K, H K Krishnappa, "Segmentation of Characters from Handwritten Kannada   Document", International journal of sensors, wireless communication control, ISSN: 2210- 3287 (Online) ISSN: 2210-3279 (Print) Volume 11, Issue 3 , 2021(Scopus indexed).

34. Asha K, H.K. Krishnappa, "Handwritten character recognition using skewed line segmentation method and long short term memory network", International Journal of System Assurance Engineering and Management, 29th November 2021 (Springer)

35. Asha K, H.K. Krishnappa, "Handwritten Character Recognition Using Unsupervised Feature Selection and Multi Support Vector Machine Classifier", International Journal of Intelligent Engineering and Systems, Vol.14, No.6, 2021(Scopus indexed).

R & Grants & Consultancy Projects

Sl.No	Year	Organization	Project title	Amount Received
01.	2005	Infosys	IT for Non IT	1,35,000=00
02.	2018	**IORA Technologies**, Jayanagara, Bengaluru-560069	*"Software Framework Development for Textile weave, color pattern designing and simulation"*	1,00,000=00

Professional Memberships

- Member of IEEE, ISTE, CSI

Student Supervision

- **Ph.D. Candidates:** 7 Graduated
- **M.Tech/M.Sc. Students:** 15
- **Undergraduate Research Mentees:** 20

Teaching

Core Courses: [Current semester]

- IS364TA– Software Engineering and Agile Technologies.
- CD343AI–Design and Analysis of Algorithms.

Advanced/Lab Courses:

- Design and Analysis of Algorithms lab.

External Connect

- Member of BoS / BoE at SJBIT and SSIT.