BIO – DATA

OF

DR.SHARADA B.

ASSISTANT PROFESSOR

DEPARTMENT OF STUDIES IN COMPUTER SCIENCE,

UNIVERSITY OF MYSORE, MANASAGANGOTHRI,

MYSURU - 570 006, INDIA.

1. Personal details.

Name	: SHARADA B.
Father's Name	: Biligiri Rangaiah C. R.
Permanent address	: #LIG- 55, New Kanthraj Urs Road, Kuvempu Nagar, Mysuru -570 023. INDIA.

Address for Correspondence   :

(Off) Asst. Prof.
    Dept. of Studies in
    Computer Science,
    University of Mysore
    Manasagangotri,   570 006
    MYSURU, INDIA.

(Res) # LIG-55,
    New Kanthraj Urs Road,
    Kuvempu Nagar-570 023
    MYSURU, INDIA.

    Phone   : +91- 821- 2419456
    Fax   : +91-821- 2510789
    Mobile : +91-7760108720

    E-mail:
    sharada@compsci.uni-mysore.ac.in
    sharadab21@gmail.com

Date of Birth	: July 21, 1978.
Place of Birth	: Mysuru, INDIA.
Sex	: Female
Nationality	: Indian
Marital Status	: Married

2. Educational Details.

2.1 *Professional*.

Ph.D.-(2009) Doctorate degree in Mathematics from the University of Mysore, Manasagangothri, Mysuru.
Title : A study on Graph Theory and its allied topics

M.Sc. – (2002-2004) Master of Science in Mathematics from the University of Mysore.

SECURED FIRST RANK WITH 91.85% OF MARKS.

M.C.A. - (1999-2002) Master of Computer Application from the University of Mysore.

SECURED DISTINCTION WITH 80.59% OF MARKS.

B.Sc. - (1996-1999) Bachelor of Science in Physics, Chemistry and Mathematics from the University of Mysore.

SECURED NINETH RANK WITH 84.5% OF MARKS.

2.2 Additional.

- Qualified in the National Eligibility Test (June 2004) accredited by UGC-CSIR, which is mandatory for any faculty position in Universities.

3. Professional Experience.

- 15.07.2015 to till date – Assistant Professor (Stage 3), Dept. of Studies in Computer Science, University of Mysore, Mysuru.

- 15.07.2010 to 14.7.2015 – Assistant Professor (Stage 2), Dept. of Studies in Computer Science, University of Mysore, Mysuru.

- 29.03.2007 to 14.7.2010 – Assistant Professor (Stage 1), Dept. of Studies in Computer Science, University of Mysore, Mysuru.

- 14.07.2006 to 28.03.2007 – Assistant Professor, Govt. First Grade College, Chamaraj Nagar.

- August 2004 to June 2006- Lecturer (Temporary), Dept. of Studies in Computer Science, University of Mysore, Mysuru.

4. Professional Activities

- Member of Board of Studies, University of Mysore during 2016-2019, 2019-2021
- Member of Board of Examination, University of Mysore during 2015-16, 2016-17, 2017-18, 2019-20, 2020-21
- Member of Board of Examination, Bangalore University during 2015-16.
- Selection Committee member for admission to M.Sc during 2015-16, 2017-18 2019-20
- Chairman of Board of Examination (PG), University of Mysore during 2014-15.

- Member of Faculty of Science and Technology, University of Mysore during 2012-14.
- Nominated for course development in M. Sc. (Computer Science) by Karnataka State Open University.
- Have guided many projects for M.Sc., MCA and M.Tech students.

5. Areas of Academic interest.

Computer Graphics, Graph theory and Algorithms, Discrete Mathematics, Linear Algebra, Probability and Statistics, Numerical Algorithms, Data Structures.

6. Research Activities.

6.1 Research Interest.

Graph Theory and Algorithms, Graph based representations in Pattern Recognition, Document Image Analysis, Character recognition

6.2 Research Supervision

Ph.D.
1. **Mohammad Issa Ahmed Sowaity.** Some studies in algebraic graph theory (Awarded, Aug 2019)
2. **Mohammad Idrees Bhat.** Segmentation and Recognition of Devanagari Text (Submitted, Nov 2020)
3. **Pavithra M.** A study on certain topics in the theory of graphs (Submitted, Nov 2020)
4. **Sushma S N.** Keyword spotting in historical handwritten Devanagari documents
5. **Mohammad Ali Jubran Alkoli**. Sentiment analysis of Arab tourists visiting India
6. **Ashwini B.** Some studies on the theory of domination in graphs

M.Phil.
1. **Shivashankara N.** Region of Interest guided Dimensionality Reduction and Compression of a big image frame (Awarded 2018)

7. Workshops/ Symposiums / Conferences attended.

- Faculty Development Program on Computer Science and Biology, November 2-6, 2020 (Online)

- Faculty Development Program on Recent trends on Computer Science, August 24-28, 2020 (Online)

- National level webinar on Latex and its Applications, August 19, 2020

- Faculty Development Program on Artificial Intelligence, May 27-31, 2020 (Online)

- National workshop on Data Analytics and Learning, November 18-20, 2019

- National Seminar on Applications of Machine Learning and Pattern Recognition in Bioinformatics, September 30, 2019

- International Conference on Data Analytics and Learning, March 30-31, 2018

- Pre-conference workshop on image classification, March 29, 2018

- Workshop on LATEX, March 11, 2017

- Workshop on Theoretical aspects of Fuzzy C-Means Clustering, February 11, 2017

- National Workshop on Natural Language Processing, November 23-30, 2016 at Mysore, India.

- National Seminar on Soft computing Techniques to Pattern Recognition, November 3-5, 2016 at Mysore, India (Member of the Organizing Committee)

- Faculty Development Programme on Advances in Pattern Recognition: An approach through MATLAB, August 31 to September 4, 2016 at Mysore, India.

- Workshop on Digital Image Processing: Basics to Recent Trends June 13-17, 2016 at Mysore, India.

- National Seminar on Multimedia Data Analysis, April 26-30, 2016 at Mysore, India.

- National Conference on Energy of Graphs, March 11-12, 2016 at Mysore, India.

- Refresher Course in Mathematical Sciences conducted by the Academic Staff College, University of Mysore, Mysore, during Feb 15 – Mar 6, 2016.

- 103rd Indian Science Congress, January 3-7, 2016 at Mysore, India (Presented a research paper)

- National Conference on Graph Theory and Number Theory, August 24, 2015 at Mysore, India (Presented a research paper)

- National Workshop on Algebra, August 22-23, 2015 at Mysore, India.

- National Conference on Mathematics and its applications, February 21, 2015 at Mysore, India (Presented a research paper)

- National Conference on Recent Trends in Physics, Mathematics and Engineering, February 20-21, 2015 at Mysore, India (Presented a research paper)

- National Conference on Recent Advances in Applied Mathematics, January 22-23, 2015 at Mysore, India (Presented a research paper)

- International Conference on Mathematics − Yesterday and Today December 26-27, 2014 at Mysore, India (Presented a research paper)

- Workshop on Multimedia Teaching − Learning Resource Creation for Online Access, Mar 18-19, 2014 at Mysore, India.

- National Conference on Recent Advances in Mathematics (NCRAM-2014) on January 24th 2014 at Mysore, India (Presented a research paper)

- Refresher Course in Mathematical Sciences conducted by the Academic Staff College, University of Mysore, Mysore, during Dec 4-24, 2013.

- Second International Conference on Advances in Computing, Communications and Informatics (ICACCI 2013), August 22-25, 2013 at Mysore, India (Chaired a session)

- International Seminar on Recent Trends in Mathematics, Aug 6, 2013 at Mysore, India (Presented a research paper).

- International Conference on the works of Srinivasa Ramanujan and Related Topics, Dec 12-14, 2012 at Mysore, India

- National Conference on Graph Theory and Number Theory-NCGTNT-2012, Mar 21-22, 2012 at Mysore, India.

- International Conference on Cognition and Recognition-ICCR-2011, Dec 9-10, 2011 at Mysore, India. (Member of the Organizing Committee)

- National Conference on applications of Mathematics and Statistics, Mar 25-26, 2011 at Mysore, India. (Presented a research paper).

- National Conference on the works of Srinivasa Ramanujan, Jul 3, 2010 at Mysore, India

- First Refresher Course in Mathematical Sciences conducted by the Academic Staff College, University of Mysore, Mysore. From 10th Jun 2010 to 30th Jun 2010.

- National Conference on Emerging Trends in Fluid Mechanics and Graph Theory, Feb 25-26, 2010 at Bangalore, India. (Presented a research paper).

- International Conference on Signal and Image Processing, Aug 12-14, 2009 at Mysore, India.

- International Conference on Graph Theory and its Applications, Dec 11-13, 2008 at Coimbatore, India.

- Instructional Workshop on Differential Geometry, June 16-25, 2008 at Mysore, India.
- International Conference on Discrete Mathematics, June 06-10, 2008 at Mysore, India. (Presented a research paper).
- Pre-Conference Instructional Workshop on Discrete Mathematics, June 02-05, 2008 at Mysore, India.
- Orientation program conducted by the Academic Staff College, University of Mysore, Mysore. From 3rd Nov. 2006 to 30th Nov. 2006.
- The UGC sponsored State Level Seminar on "Image Processing and Applications" organized by the Dept. of Computer Science, Yuvaraja's College, University of Mysore, Mysore on 27th and 28th Mar. 2006.
- International Conference on Cognition and Recognition, Dec 22-23, 2005, at Mysore, India.
- Cognition 2K5 A National Technical Symposium, March 12-13, 2005 at Mysore, India

8. Research Publications.

1. Automatic Recognition of Legal Amounts on Indian Bank Cheques: A fusion based approach at feature and decision level, International Journal of Computer Vision and Image processing, Vol. 10, pp. 54-73, 2020

2. Towards Accurate Identification and Removal of Shirorekha from *Off-line* Handwritten Devanagari word Documents. 2020 17thInternational Conference on Frontiers in Handwriting Recognition (ICFHR).IEEE International Publishing, pp-234-239, 2020.

3. Eccentric harmonic index for the subdivision of some graphs, Proceedings of the Jangjeon Mathematical Society, Vol. 23, No. 2, pp. 159 – 168, 2020

4. Eccentric harmonic index of a graph, Arab J. Basic App. Sci., Vol. 26, pp 497-501, 2019

5. Miscellaneous results on pendant domination of graphs, Adv. App. Math. Sci., Vol. 18, No. 10, pp 1027-1038, 2019

6. Keyword Spotting in Scanned Images of Historical Handwritten Devanagri Documents, International Journal of Computer Applications, Vol.181, No. 36, pp 5-9, 2019

7. The Block energy of a graph, Online Journal of Analytic Combinatorics, Vol. 2, No. 14, pp 1-13, 2019

8. The eccentricity extended energy of a graph, Proceedings of the Jangjeon Mathematical Society, Vol. 2, No.22, pp 337-347, 2019

9. Keyword Spotting in Historical Devanagari Manuscripts by Word Matching, Lecture Notes in Networks and Systems, Springer, pp 65-76, 2019

10. Automatic Recognition of Legal Amount words of Bank Cheques in Devanagari Script: an approach based on Information Fusion at Feature and Decision Level, International Conference on Recent Trends in Image Processing & Pattern Recognition, Springer International Publishing, pp 96-107, 2018

11. Spectral Graph-based Features for Recognition of Handwritten Characters: A Case Study on Handwritten Devanagari Numerals, Journal of Intelligent Systems, Vol. 29, No.1, pp 799-813, 2018

12. On The Independent Domination Edge Lift Stable Trees, Global Journal of Pure and Applied Mathematics, Vol. 13, No. 7, pp 937-942, 2018

13. On the Sum-Eccentricity Energy of a Graph, International Journal of Applied Graph Theory, Vol 2, No. 2, pp 1-8, 2018

14. A statistical approach for matching handwritten Devanagari word images, Proceedings of the International Conference on Signal and Image Processing, pp 22 – 26, 2017

15. The Sum-Eccentricity Energy of a Graph, International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC), Vol 5, No. 6, pp 293 – 304, 2017

16. Laplacian Sum-Eccentricity Energy of a Graph, Mathematics Interdisciplinary Research, Vol 2, pp 209-220, 2017

17. Recognition of Handwritten Devanagari Numerals by Graph Representation and Lipschitz Embedding. In: Santosh K., Hangarge M., Bevilacqua V., Negi A. (eds) Recent Trends in Image Processing and Pattern Recognition. RTIP2R 2016. Communications in Computer and Information Science, vol 709. Springer, Singapore, 2017

18. Perfect domination edge subdivision stable and critical graphs, Int. J. of Mathematics and its Applications, Vol 4, No. 2(D), pp 7-11, 2016.

19. Recognition of handwritten Devanagari numerals by graph representation and SVM, International Conference on Advances in Computing, Communications and Informatics, September 21-24, 2016, Jaipur, India, IEEE explore, pp 1930-1935

20. Graph based features for recognition of handwritten Devanagari numerals, International Conference on Communication and Signal Processing (ICCSP-16), April 6-8, 2016, Chennai, India, IEEE explore, pp 1710-1715.

21. Independent domination critical and stable graphs upon edge subdivision, J. of Computer and Mathematical Sciences, Vol 6(6), pp 298-304, 2015

22. Independent domination edge subdivision critical and stable graphs, Proceedings of National conference on Recent Trends in Physics, Mathematics and Engineering, February 20-21, pp 257-260, 2015.

23. Trees with unique minimum dominating sets, Int. J. of Soft Computing, Mathematics and Control, Vol 4, No.1, pp 13-17, 2015.

24. On the domination subdivision number of grid graphs, Int. J. of Graph Theory, Vol 1, No.1, pp 17-22, 2013

25. Trees with equal perfect and restrained domination numbers, Adv. Studies Contemp. Math., Vol 23, No.1, pp 81-84, 2013.

26. On the neighbourhood subdivision number of trees, Advances and applications in Computer Science and Engineering, Vol 9, No.1, pp 5-16, 2012.

27. Perfect Domination Excellent Trees, International journal of Mathematical Combinatorics, Vol 2, pp 76 –80, 2012.

28. On fuzzy middle graph, Advances and Applications of Discrete Mathematics, Vol 9, No. 1, pp 57 – 64, 2012.

29. A characterization of trees based on independent domination subdivision number. Proceedings of the National Academy of Sciences, Sect. A, Vol. 80, Pt. IV, pp 289-294, 2010.

30. On the domination subdivision numbers of trees. Australasian Journal of Combinatorics, Vol. 46, pp 233-239, 2010.

31. A characterization of trees whose domination subdivision number is one. Journal of Analysis and Computation, Vol. 4, No. 2, pp 95-99, 2008.

32. Disjoint Perfect Domination Number of a Graph. Journal of Applied Mathematical Analysis and Applications, Vol 3, No. 2, pp 127-135, 2008.

33. Partially Balanced Incomplete Block Designs arising from minimum efficient dominating sets of a Graph. Bulletin of Pure and Applied Mathematics, Vol. 2, No. 1, pp 47-56, 2008

34. A Note on Alternative Algebra bundles. Journal of Analysis and Computation, Vol. 3, No. 1, pp 1-8, 2007

9. Medals and Prizes won.

The following is the list of medals and prizes awarded by the University of Mysore, Mysuru.

9.1. *B. Sc. (Mathematics)*

- The Principal M. Munigaviappa Gold Medal
- M. Gopala Swamy Memorial Prize.
- Prof. N. Ramaiah Cash Prize.
- Prof S. V. Keshava Hegde Memorial Prize.
- Jyothsna Haravu & Kadaba Chokkamma Ananthram Iyengar Memorial Prize.
- The Prof. B. S. Madhava Rao Prize.

9.2. *M. Sc. (Mathematics)*

- Prof. N. Rudraiah Felicitation committee Gold Medal.
- The Sridhar Kumar Gold Medal.
- Prof. K. S. K. Iyengar Gold Medal.
- Sri Alhaje D. N. Nayeemulla Khan Endowment Gold Medal
- Prof. V. K. Nataraj Gold Medal.
- Prof. N. A. Nickam Science Gold Medal.
- The Prof. M. T. Narayaniengar Memorial Prize.
- Prof. K. Venkatachalaingar Cash Prize.