

Prof. K.Chidananda Gowda



PERSONAL DATA

1. NAME : **Dr. K. Chidananda Gowda**
2. DATE OF BIRTH : June 15, 1942.
3. PLACE OF BIRTH : Chockadi, Sullia Taluk,
South Kanara Dt.,
Karnataka State, India.
4. ADDRESS : Former Vice-Chancellor of
Kuvempu University,
3004, " Udayaravi"
5th Main, 12th Cross
V.V. Puram, Mysore-570002
Karnataka
Telephone(R) : 0821-2511707
E-Mail: kcgowda12@ yahoo.com
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5. QUALIFICATIONS

Post Doctoral Research

1) **NASA, New York, USA:** 2 years (1981-83)

2) **INRIA, Paris, FRANCE:** 1 year (1989-90)

Ph.D. : March 21, 1979

Department of Electrical Engineering,
Indian Institute of Science,
Bangalore - 560 012, India.

Master of Engg. Degree: March 13, 1969.

(Control Engineering) (First Class),
M.S. University of Baroda, Baroda, India.

Bachelor of Engineering : Dec. 1964.

(Electrical Engineering) (First Class),
University Visweswaraya College of Engg.
Bangalore - 560 001, India.

6. PROFESSIONAL RECOGNITION

1. Recipient of Post Doctoral NRC NASA Fellowship (Sept 1981 - Sept 1983) at NASA Goddard Institute of Space Studies, 2880 Broadway, New York, NY 10025, U.S.A.
2. Recipient of High Level Research Fellowship of French Ministry of Foreign Affairs (1989-90) at INRIA, Rocquencourt, FRANCE.
3. Visiting Professor to Laboratoire de Recherche en Informatique et Automatique, Rocquencourt, FRANCE, June/July, 1979.

4. Curriculum Vita is included in "Who is Who in Classification and Indexing", prepared by the International Federation of Documentation Committee on Classification Research, Frankfurt, GERMANY.
5. Chaired a session in the 1984 International Conference on Industrial Electronics, Control, and Instrumentation (IECON'84) held in Tokyo, Japan during October 22-26, 1984.
6. Chaired a session in the International Conference on Higher Education, Gottlieb Duttweiler Institute, Zurich, Switzerland during Aug. 18-22, 1986.
7. Selected as Visiting Teacher (1992-93) by Indian Society for Technical Education, New Delhi.
8. Visiting Professor at University Of Paris IX, Dauphine in 1993, 1994.
9. Chaired a session in the International Conference on Ordinal and Symbolic data analysis, Paris, France, during June 20-23, 1995.
10. The first Professor and the founder Head for the Dept. of Computer Science and Engg., S. J. College of Engineering, Mysore.
11. The founder coordinator for MSc Computer Science program at PG Centre, Manasagangotri, University of Mysore, Mysore.
12. Co - Chairman of the Indo - French Seminar on Symbolic Data Analysis and its Applications, University of Paris IX - Dauphine, LISE - CEREMADE, during 23 - 25 Sep. 1997.
13. Invitee to KESDA'98 Conference, Luxembourg, 27-28 April, 1998.
14. Invitee to Reunion, France, 25 Sept. 1998.
15. Invited Talk, ECML Conference 2004, Pisa, Italy
16. Chairman, Examination Reforms Committee (Govt. of Karnataka, 2008)
17. Chairman, Kannada Software Development Committee (Karn. Govt., 2010)

INTERNATIONAL CONFERENCES ATTENDED :

1. Presented Technical paper entitled " Gravitational Clustering Using the Concept of Mutual Nearest Neighborhood," in the joint meeting of the Classification and Psychometric Society, Montreal, Canada, May 31 - June 2, 1982.
2. Presented Technical paper entitled " A New Method of Mapping Multidimensional Data to Lower Dimensions," in the Int. Symp. on Remote Sensing of the Environment, 2nd Thematic Conf. Remote Sensing for Exploration Geology, Fort Worth, Texas, 6 -10 Dec. 1982.
3. Presented Technical paper entitled "A Dot Pattern Clustering Procedure useful for Machine Vision," in the Int. Conf. on Industrial Electronics, Control, and Instrumentation (IECON 84)held in Tokyo, Japan, 22-26 Oct. 1984.
4. Presented Technical paper entitled " A novel Information Technology Model for Higher Education," in the Int. Conf. on Higher Education, Gottlieb Duttweiler Institute, Zurich, Switzerland, 18-22 Aug. 1986.
5. Presented Technical paper entitled " A Framework to Estimate Natural Classes in Remotely Sensed Data," in the IEEE 4th Int. Conf. of Australia and New Zealand on Intelligent Information Systems (ANZIIS-96), Adelaide, South Australia, Nov. 1996.
6. Presented Technical paper entitled " A Number Theory Based Image Compression," in the IEEE (ANZIIS-96), Adelaide, South Australia, Nov. 1996.
7. Presented Technical paper entitled " A Neural Network Based Expert System Model for Conflict Resolution," in the IEEE (ANZIIS-96), Adelaide, South Australia, Nov. 1996.
8. Presented Technical paper entitled " Compression of Multidimensional Image Data: A New Technique," in the Int. E.I. Conf. Boston, 1998.
9. Presented Technical paper entitled " Fuzzy Clustering using Symbolic Data Analysis for Multispectral data," in the International Conf. on Knowledge Extraction from Statistical Data

- (Data Mining and Symbolic Data Analysis) KESDA'98 held in Luxembourg, 27-28 Apr. 1998
10. Presented an Invited Talk entitled " Symbolic Objects and Symbolic Classification" in the ECML Conference at Pisa, Italy , September 2004
 11. Presented a paper entitled " The Art of Learning, Working, and Living in the Global Era" in the East Asian International Conference on Human & Social Development held at Kuala Lumpur, Malaysia, November 12-14, 2005

7. PROFESSIONAL EXPERIENCE

January 18, 2002 to January 18,2006	:	Vice-Chancellor, Kuvempu University
April 1, 2002 to March 31, 2005	:	Member, Board of Governors, I.I.T. Mumbai
October 18,2001 – January 17, 2002	:	Director, JSS Research Foundation
June 1, 2000 – October 17,2001	:	Principal, S.J. College of Engg., Mysore
March 1994 – May 31,2000	:	Vice-Principal ,and Head of Comp. Sc. & Engg
Feb 13, 1984 – March, 1994	:	Professor & Head Dept. of Computer Science & Engg., Sri Jayachamarajendra College of Engg., Mysore - 570 006, Karnatka State, India.
June 4, 1989 - July 26, 1990	:	High level Research Fellow French Ministry of Foreign Affairs, INRIA, France.
Nov. 9, 1987 - Oct. 31, 1988	:	Professor & Coordinator, Dept. of studies in Computer Science, University of Mysore, Manasa Gangothri, Mysore.
Sep. 24, 1981 - Sep 25, 1983	:	Resident Research Associate NASA Goddard Institute of Space Studies 2880 Broadway, Newyork, NY #10025, USA.
July 28, 1978 - Feb 12, 1984	:	Professor and Head Dept. of Electrical Engineering, Sri Jayachamarajedra College of Engg., Mysore - 570 006, Karnataka State, India.
Aug. 18, 1969 - July 27, 1978	:	Asst. Professor of Electrical Engg. Dept. of Electrical & Electronics Engg., Sri Jayachamarajedra College of Engg., Mysore - 570 006, Karnataka State, India.
Feb 5, 1969, Aug 14, 1969	:	Lecturer in Electrical Engineering, G. S. Institute of Technology and Science, Indore, Madhya Pradesh, India.
Sep 12, 1964 - Sep 1, 1966	:	Lecturer in Electrical Engineering National Institute of Engineering, Mysore - 570 008, India.

8. UNIVERSITY & OTHER POSITIONS HELD

1. Vice-Chancellor, Kuvempu University, Karnataka (18-1-2002 to 18-1-2006)
2. Member, Board of Governors, I.I.T., Mumbai (April 1, 2002 to March 31, 2005)
3. Member of the Syndicate, Jadhavpur University, Calcutta (2000 – 2002)
4. Advisor, Campus - wide Internet Project, Univ. of Mysore (1998 - 99)

5. Consulting Academician cum Visiting Scientist, DOS in Computer Science, University of Mysore (1997 - 98).
6. Dean, Faculty of Engineering, University of Mysore (1993 - 94)
7. Member of The Senate, University of Mysore (1993 - 94)
8. Member of The Academic Council, University of Mysore (1993 - 94)
9. Professor & Co-ordinator, M.Sc.(Comp. Sc.), Univ. of Mysore (1987 - 88)
10. Chairman, Board of Studies, and Board of Examiners, University of Mysore,
11. Chairman, Board of Studies(PG), Kuvempu University,
12. Chairman, Board of Examiners, University of Mysore.
13. Member, B.O.S of Several Universities.

9. RESEARCH INTERESTS

- | | | |
|-------------------------|------------------------|------------------------------|
| i. Pattern Recognition, | ii. Image Processing, | iii. Learning, |
| iv. Remote Sensing | v. Computer Vision, | vi. Artificial Intelligence, |
| vii. Fuzzy Logic, | viii. Neural Networks, | ix. Genetic Algorithms. |

10. Ph.D. GUIDANCE AND ADJUDICATION:

- | | | |
|-----------------------|---|--|
| Awarded | : | 10 |
| Ph.D. Adjudicator for | : | Indian Institute of Science, Bangalore, India.
University of Reunion, France,
University of Mysore, India.
University of Kerala, India.
Bharathiyar University, India. |

11. INTERNATIONAL JOURNAL REVIEWER:

1. Reviewer for IEEE Computers Society (Transactions on Pattern Analysis and Machine Intelligence) Journal, USA.
2. Reviewer for Journal of Pattern Recognition Letters, Netherlands.

12. RESEARCH PROJECTS COORDINATED

1. "Multispectral Data Classification and Extraction of Geographical Features from Spatial Data Bases," sponsored by Defence Research and Development Organisation (R&D), New Delhi, for a period of 3 years (from 20.04.1988 to 20.04.1991). Amount sanctioned - Rs. 21,72,000.
2. "Symbolic Clustering of French SPOT Satellite Data for Forest Inventory," sponsored by Indo-French Centre for the Promotion of Advanced Research (IFCPAR), New Delhi, for a period of 3 years (from 01.01.1994 to 31.12.1996). Amount sanctioned - Rs. 25,70,000.
3. Coordinating several MHRD/AICTE sponsored research projects in the areas of Cognitive

Engineering.

4. "Fast Auto Configuring Neural Network for Data Mining," sponsored by Indo-Kazakh Inter Governmental Program of Cooperation on Technology (DST), 3 years (1998 - 01).

13. CONFERENCES/WORKSHOPS COORDINATED

1. Indo-French Seminar/Workshop entitled "Indo-French Seminar on Symbolic Data Analysis and its Applications," sponsored by Indo-French Centre, New Delhi, held in Paris, Sep. 1997.
2. "Symbolic and Fuzzy Approaches to Data Processing," sponsored by ISTE, New Delhi, April. 21-26, 1997.
3. "Artificial Neural Networks," sponsored by ISTE, New Delhi, 28th June - 10th July, 1993.
4. "Image Processing, Dimensionality Reduction and Cluster Analysis," sponsored by DRDO, New Delhi, 18-23 February, 1991.

14. MEMBERSHIPS OF PROFESSIONAL BODIES

1. International Association for Pattern Recognition (IAPR)
2. Computer Society Of India (CSI)
3. Indian Society for Technical Education (ISTE)
4. Fellow, Institution of Engineers (India)

15. TECHNICAL PUBLICATIONS

Ph.D. PUBLICATIONS

"Mutual Nearest Neighborhood Concept in Pattern Recognition", Doctoral thesis, Dept. of Electrical Engg., Indian Institute of Science, Bangalore, INDIA.

REPORTS

1. Nonparametric Clustering Using the Concept of Mutual Nearest Neighborhood, Report EE/33, Dept. of Electrical Engg. I.I.Sc. Bangalore, April 1977.
2. Clustering and Unsupervised Learning Using the Concept of Mutual Nearest Neighborhood, Report EE/49, Dept. of Electrical Engg. I.I.Sc. Bangalore, India, January 1978.

Scientific Citations: 971 as of 2013; H-Index: 11; I-10 Index: 11

RESEARCH PAPERS

1. "The Realization of a Class of RC Impedances with Minimum Total and Equal Resistances", Proc. of 5th Iranian conference on Electrical Engg., Shiraz, Iran, October 27-30, 1975.
2. "Editing and a Hierarchical Error Correction Algorithm for Nonparametric Learning With an Imperfect Teacher", Proc. 4th National Systems Conference, Coimbatore, India, June 2-4, 1977.
3. "Agglomerative Clustering Using the Concept of Mutual Nearest Neighborhood", Pattern

- Recognition, Vol.10, pp #105-112, 1977.
4. "A Clustering Approach to Unsupervised Learning", Proc. 5th National Systems Conf. PAU, Ludhiana, India, Sep. 4-6, 1978.
 5. "Disaggregate Clustering Using the Concept of Mutual Nearest Neighborhood", IEEE Trans. on Systems, Man and Cybernetics, Vol. SMC.8, pp #888-895, Dec. 1978.
 6. "The Condensed Nearest Neighbor Rule Using the Concept of Mutual Nearest Neighborhood", IEEE Trans. on Information Theory. Vol. IT-25, pp #488-490, July 1979.
 7. "Editing and Error Correction Using the Concept of Mutual Nearest Neighborhood:", Proc. 1979 SMC Society Annual Meeting, Denver, Colorado, Oct. 1979.
 8. "Learning with a Mutualistic Teacher", Pattern Recognition, Vol.11, pp #383-390, 1979.
 9. "Gravitational Clustering Using the Concept of Mutual Nearest Neighborhood", presented at the joint meeting of the Classification and Psychometric Society, Montreal, Canada, May 31 - June 2, 1982.
 10. "A New Method of Mapping Multidimensional Data to Lower Dimensions", presented at the International Symp. Remote Sensing of the Environment, 2nd Thematic Conf. Remote Sensing for Exploration Geology, Fort Worth, Texas, Dec. 6-10, 1982.
 11. "Cluster Detection in a Collection of Collinear Line Segments", Pattern Recognition, Vol.17, No.2, 1984.
 12. "A Feature Reduction and Unsupervised Classification Algorithm For Multispectral Data", Pattern Recognition, Vol.17, No.6, 1984.
 13. "A Dot Pattern Clustering Procedure Useful for Machine Vision", 1984 International Conference on Industrial Electronics, Control, and Instrumentation (IECON 84) held in Tokyo, Japan during October 22-26, 1984.
 14. "Impact of information Technology on the Educational System", National Conf. On Impact of Information Technology, Hyderabad, Dec 12-14, 1985.
 15. "A Novel Information Technology Model for Higher Education", International Conference on Higher Education, Gottlieb Duttweiler Institute, Zurich, Switzerland during Aug.18-22, 1986.
 16. "Analysis of Remotely Sensed Data by Mapping to Color and Planar Spaces", 22nd Intl. Symposium on Remote Sensing of environment, ERIM, Michigan (Abidjan), 1988.
 17. "Compression of Multidimensional Image Data: A New Technique", Intl. E.I. conference, Boston, 1988.
 18. "Color Composite Imaging of Multidimensional Data: A New Approach", All India seminar on Remote sensing and Image processing, Gwalior, 1988.
 19. "Color Representation of Multispectral Data", II Intl. Conference on color in Information Technology and Visual display, IERE, Surrey, UK, 1988.
 20. "A New Technique for Image Compression and Display Using Graphics Projection", Intl. E.I. conference, Boston, 1989.
 21. "Dimensionality Reduction and Color Composite Imaging of Remotely Sensed Data: New Approach", 7th Thematic conference on remote sensing for exploration Geology, ERIM, Calgary, Alberta, Canada, 1989.
 22. "Elimination of Least Desirable Features and Dimensionality Reduction for Pattern Recognition Applications", International Conference on Automation, Robotics & Computer Vision, Singapore, September 1990.
 23. "Symbolic Clustering Using a New Similarity Measure", IEEE Trans. on Systems, Man and Cybern., Vol.22, No.2, pp #368-378, March 1992.
 24. "Unsupervised Learning Through Symbolic Clustering", Pattern Recognition Letters, 12, pp #259-264, May 1991.
 25. "Symbolic Clustering Using a New Dissimilarity Measure", Pattern Recognition, Vol. 24,

- No.6, 1991.
26. "Efficient Training and Clustering Using Self Organizing Maps", Natl. Conf. on Neural Networks, Madras, India, March 1993.
 27. "Edge Detection Using Neural Nets", Symposium cum Workshop on Applications of Neural Networks in Nuclear Science and Industry, BARC, Bombay, India, Nov 1993.
 28. "2-D Object Recognition Using Self-Organizing Neural Network", Symposium cum Workshop on Supercomputing for Scientific Visualization, BARC, Bombay, India, Feb 1994.
 29. "Edge Enhancement Using Artificial Neural Network", Tenth Thematic Conf. on Geologic Remote Sensing, San Antonio, May 1994.
 30. "Adaptive Image Restoration Using Neural Network", First IEEE Intl. Conf. on Image Processing, Texas, Nov 1994.
 31. "A New Approach for Feature Transformation to Euclidean Space Useful in the Analysis of Multispectral Data," IEEE IGARSS-94 Symposium, 1994.
 32. "Agglomerative Clustering of Symbolic Objects using the concepts of both similarity and dissimilarity", Pattern Recognition Letters, January 1995.
 33. "Divisive Clustering of Symbolic Objects Using the Concepts of Both Similarity and Dissimilarity", Pattern Recognition, 1995.
 34. "A Modified Condensed Nearest Neighbor Rule Using the Symbolic Approach", Second IEEE Australian and New Zealand conference on Intelligent Systems, Brisbane Australia, Nov. 1994
 35. "Unsupervised Learning Through Symbolic Clustering Using the Concepts of Both Similarity and Dissimilarity", IEEE Fourth Symposium on Intelligent Systems, Indian Institute of Science, Bangalore, India, November 1994.
 36. "A Experiment with Editing and Error Correction for Learning with an Imperfect Teacher Using the Symbolic Approach", 18th National Systems Conference, Agra, India, January 1995.
 37. "Cluster Validity for Symbolic Objects Using Fuzzy Sets", National Conference on Artificial Intelligence and Neural Networks, Guru Nanak Dev University, Amritsar, India, February 1995.
 38. "Genetic Algorithms for Symbolic Clustering ", Journal of Intelligent Systems, Indian Institute of Science, Bangalore 1995.
 39. "Use of Both Similarity and Dissimilarity for Symbolic Clustering", Computer Science and Information Journal - Special issue on Scientific Computing, Computer Society of India 1995.
 40. "Symbolic Clustering using Genetic Algorithms (GAs)", IEEE International Conference on Evolutionary Computation, Perth, Australia November 1995.
 41. "The use of Similarity and Dissimilarity measures for Gravitational Clustering", International Conference on ordinal and symbolic data analysis, Paris, June 1995, France.
 42. "A new technique for Clustering Symbolic objects using the Gravitational approach", 1995 IEEE International Conference on Systems, Man and Cybernetics, Vancouver, Canada, October 1995.
 43. "Improved Edge Detection in Multi-spectral Image Through Dimensionality Reduction," ERIM Geological Conf., Ann Arbor, USA, 1995.
 44. " Divisive Clustering of Symbolic objects using the concepts of both similarity and dissimilarity. " in Pattern Recognition, 28(8): 1277-1282, 1995
 45. " Agglomerative clustering procedure for symbolic objects using the concepts of both similarity and dissimilarity" in Pattern Recognition Letters, 16(6): 647-652, 1995
 46. "A Neural Network Based Expert System Model for Conflict Resolution," IEEE 4th Int. Conf. of Australia and New Zeland on Intelligent Information Systems(ANZIIS-96), Adelaide, South Australia, Nov. 1996.

47. "A Number Theory Based Image Compression," IEEE 4th Int. Conf. of Australia and New Zealand on Intelligent Information Systems (ANZIS-96), Adelaide, South Australia, Nov. 1996.
48. "Modified Agglomerative Clustering Useful for Quantitative Analysis of Remotely Sensed Data," Eleventh Thematic Conf. and Workshops on Applied Geologic Remote Sensing, Las Vegas, Nevada, 27 - 29, Feb. 1996.
49. "Symbolic Clustering of Multispectral Data," Fifth Conf. of Intl. Federation of Classification Societies (IFCS-96), Kobe, Japan, 27-30 Mar. 1996.
50. "Modified Divisive Clustering Useful for Quantitative Analysis of Remotely Sensed Data," IEEE Intl. Geosci. and Remote Sensing Symp. (IGARSS'96), Lin Coln, Nebraska, USA, 27-31 May, 1996.
51. "A Framework to Estimate Natural Classes in Remotely Sensed Data," IEEE 4th Intl. Conf. of Australia and New Zealand on Intelligent Information Systems (ANZIS-96), Adelaide, South Australia, Nov. 1996.
52. "Symbolic Agglomerative Clustering for Quantitative Analysis of Remotely Sensed Data," Int. Conf. on Remote Sensing and GIS/GPS (ICORG-97), India, Mar. 1997.
53. "Boundary Extraction of Remotely Sensed Data Using Symbolic Clustering," Int. Conf. on Remote Sensing and GIS/GPS (ICORG-97), India, Mar. 1997.
54. "A new Approach to the Management of Natural Resources Using Symbolic Data Analysis," VIII Int. Symp. on Applied Stochastic Models and Data Analysis (ASMDA), Italy.
55. "Symbolic ISODATA Clustering Procedure Useful for Land Cover Classification," IEEE Int. Geosci. and Remote Sensing Symp., Singapore, 3-8 Aug. 1997.
56. "Symbolic Data Analysis of Multitemporal Data : An Application to Seasonal Analysis," IEEE Int. Geosci. and Remote Sensing Symposium (IGARSS-97), Singapore, 1997.
57. "Symbolic Data Analysis Based Forest Cover Classification Using Multispectral Data - A Case Study Employing IRS-1B LISS II data for Coorg area, Karnataka, India," Submitted to IEEE Int. Geoscience and Remote Sensing Journal.
58. "Priority Based Feature Reduction For Multispectral Remotely Sensed Data," *12th Int. Conf. and Workshops on Applied Geologic Remote Sensing, ERIM*, Denver, 17-19 Nov. 1997.
59. "Computer Aided Analysis of Remotely Sensed Data for Efficient Management of Water Resources," 4th Int. Conf. on Computer Methods and Water Resources - CMWR 97, United Kingdom, 16- 18 Jun. 1997.
60. "Normalization Based Dimensionality Reduction of Symbolic Data: A New Approach," Int. Conf. on Ordinal and Symbolic Data Analysis, Paris, France, June, 95.
61. "A New Algorithm for a Go-around Robot Using Combined Farthest and Nearest Neighbor Principles," Twelfth Int. Conf. AIENG-97, ITALY, 1997.
62. "Farthest Neighbor Approach for Solving Traveling Salesman Problem," *7th National Seminar on Theoretical Computer Science*, Chennai, 11-14 June 1997.
63. "A New Fuzzy ISODATA Procedure for Classification of Symbolic Objects," Workshop on statistical techniques in pattern recognition, Prague, CZECH REPUBLIC, 1997.
64. "A New Approach to Classification of Symbolic Objects Using Fuzzy Theory," 3rd National Conf. on Neural Networks and Fuzzy Systems, Chennai, 1997.
65. "Classification of Symbolic Data Using Fuzzy Set Theory," First Int. Conf. on Conventional and Knowledge based Intelligent Electronic Systems, KES-97," Adelaide, Australia, 1997.
66. "Unsupervised Classification for Remotely Sensed Data Using Fuzzy Set Theory," *IEEE Int. Geosci. and Remote Sensing Symp.*, Singapore, 3-8 Aug. 1997.
67. "Automated Clinical Trials in Cardio Vascular Medicine : A Case Study," Proceedings of the National Conference on Medical Informatics, Bangalore, India, 11-12 Apr. 1997.
68. "Symbolic Objects and Classification," *Proceedings of Indo-French Workshop*, Sep. 1997.

69. "Symbolic Data Analysis Approach to TSP with Spatially Spread Vertices," *Proceedings of Indo-French Workshop*, 23-25 Sep. 1997.
70. "Symbolic Approach to TSP," *Cinquiemes Recontres De La Societe Francophone De Classification, Lyon, France*, 17-19 Sep. 1997.
71. "Fuzzy Classification Using Similarity Measure for Remotely Sensed Data," *12th Int. Conf. and Workshops on Applied Geologic Remote Sensing, ERIM, Denver*, 17-19 Nov. 1997
72. "A Symbolic Distance Fuzzy Classifier," *Int. Conf. on Cognitive Systems, ICCS'97, India*, 13-15 Dec. 1997.
73. "Fuzzy Classification for Digital Hand Radiographs," *Int. Conf. on Cognitive Systems, ICCS'97, India*, 13-15 Dec. 1997.
74. "Symbolic Clustering of Remotely Sensed Data using a New Dissimilarity Measure," *Int. Conf. on Cognitive Systems, ICCS'97, India*, 13-15 Dec. 1997.
75. "The Divide and Conquer Methodology to Improve the Performance of Genetic Algorithms," *Advances in Computing CAD Comm'98 Conf., Calicut*, 6-8 Apr. 1998.
76. "A New Dissimilarity Measure To Improve the GA Performance," *11th Int. Conf. on Industrial & Engg. applications of AI & Expert Systems (IEA-98-AIE), Castellon, Barcelona, Spain*, 1-4 June 1998.
77. "A New Priority Rotation Methodology to Improve the Performance of Genetic Algorithms," *Progress in Electromagnetic Research Symposium (PIERS 98), Nantes, France*, 13-17 July 1998.
78. "A Cyclic Selection Methodology for Genetic Algorithms," *8th National Seminar on Theoretical Computer Science, Bhubaneswar, Orissa*, 11-14 June 1998.
79. "A New Multiparent Crossover Methodology," *National Seminar on Artificial Neural Networks and Cognitive Systems, ANCS-98, Cochin*, 23-25 Sep. 1998.
80. "Analysis of IRS 1B LISS - II Image using Fuzzy and Symbolic Approach," *IEEE 1998 Int. Geoscience and Remote sensing Symposium(IGARSS'98), Seattle Washington, USA*, 6-10 July 1998.
81. "Fuzzy Hierarchical Analysis for Remotely sensed Data," *IEEE 1998 Int. Geoscience and Remote sensing Symposium(IGARSS'98), Seattle Washington, USA*, 6-10 July 1998.
82. "Fuzzy Clustering using Symbolic Data Analysis for Multispectral Data," *KESDA'98 Conference, Luxembourg*, 27 - 28 Apr. 1998.
83. "Fuzzy Multistage ISODATA for Symbolic Data," *International Conference on Cognitive Systems - ICCS'98, New Delhi*, 13-15th Dec. 1998.
84. "Improving the Genetic Algorithm Performance with High Probability Mutation," *International Conference on Cognitive Systems - ICCS'98, New Delhi*, 13-15th Dec. 1998.
85. "A Dynamic Crossover Methodology For Genetic Algorithms," *International Conference on Combinatorics, Statistics, Pattern Recognition and Related Areas, Mysore*, 28-30 Dec. 1998.
86. "A Solution to TSP through the Concept of Mutual Nearest Neighborhood," *International Conference on Combinatorics, Statistics, Pattern Recognition and Related Areas, Mysore*, 28-30 Dec. 1998.
87. "Fast Discrete Cosine Transform Using Ramanujan Numbers And Its Application To Image Compression," *International Conference on Combinatorics, Statistics, Pattern Recognition and Related Areas, Mysore*, 28-30 Dec. 1998.
88. "Clustering in Cardiology, " *International Conference on Combinatorics, Statistics, Pattern Recognition and Related Areas, Mysore*, 28-30 Dec. 1998.
89. "A Fuzzy Model For Conflict Resolution In Numeral Recognition, " *International Conference on Combinatorics, Statistics, Pattern Recognition and Related Areas, Mysore*,

- 28-30 Dec. 1998.
90. "An Efficient Technique to solve TSP and its extension to Spatially Spread Vertices," Journal of Current Science, Vol. 75, No. 10, Nov. 25th 1998.
 91. "Symbolic Data Analysis for Image Processing," Chapter Published in the Volume Soft-Computing for Image Processing, Physica-Verlage, Heidelberg, 1999.
 92. "An A* like Algorithm to improve the performance of GA's," The Proceedings of the Information, Decision, Control Symposium at Adelaide, Australia, pp #8-10, Feb. 1999.
 93. "Fast Arithmetic Fourier Transform," IASTED, International Conference on Signal and Image Processing, Oct 18-21, 1999, Nassau, Bahamas.
 94. "A Computationally Efficient DCT Algorithm using Ramanujan's Number and its Application to Image Compression," IASTED, International Conference on Signal and Image Processing, Oct 18-21, 1999, Nassau, Bahamas.
 95. "Fast 2D-DFT Algorithm using Number Theoretical Approach for SAR Data Processing," International Radar Symposium IRS 1999, Dec. 1999, Bangalore.
 96. "An ISODATA Clustering Procedure for Symbolic Objects Using a Distributed Genetic Algorithm," Journal of Pattern Recognition Letters, Vol. 20 pp, Issue 7, #659-666, 1999.
 97. "Clustering of Symbolic Objects Using Gravitational Approach," in IEEE Transaction on Systems, Man and Cybernetics, Part B, Vol.29, No.6, December, 1999.
 98. "A New Non hierarchical Clustering Procedure for Symbolic Objects" in IDEAL, 2000 Program in Mong Man Wai Building, CUHK, P. 35-41 in December, 2000.
 99. Presented a paper entitled "Symbolic Objects and Symbolic Classification" in the ECML Conference at Pisa, Italy, September 2004
 100. "Gross National Wisdom: Engagements of Universities with the Society" in University News, Vol.42, No.46, P. 37-40, November 15-21, 2004
 101. "Fuzzy Symbolic Analysis for classification of Symbolic data" in Special session on SDA in International Conference on Pattern Recognition and Machine Intelligent at ISI, Kolkata in December, 2004
 102. Presented a paper entitled "The Art of Learning, Working, and Living in the Global Era" in the East Asian International Conference on Human & Social Development held at Kuala Lumpur, Malaysia, November 12-14, 2005
 103. Presented a paper entitled "**Socio-Economic Empowerment by Universities: A SWOT Approach**" in the National Seminar of 80th Annual Meeting of Vice-Chancellors held at IIIT, Allahabad, Nov. 24-27, 2005 and paper published in the University News, Vol.43, No.47, pp# 78-84, Nov.21-27, 2005

16. SCIENTIFIC CITATIONS : 971 as of 2013; H-Index: 11; I-10 Index: 11

17. TECHNICAL BOOKS :

- i). Technovision (Edited) (1999)
- ii). "Symbolic Data Analysis for Image Processing,
"Chapter Published in the Volume Soft-Computing
for Image Processing, Physica-Verlage, Heidelberg. (1999)

18. AWARDS

1. Karnataka Sahitya Academy Award (1986) for " Putanigala Vignana Padyagalu".
2. C.M.Nagaraj Memorial Award (2010), C.M.Nagaraj Foudation Trust, Bangalore.
3. "DejaGow Sahitya Prashasti" (2011), Mukhyaprana Sahitya Academy, Mysore

19. HONORARY AWARDS

Honorary Colonel Commandant NCC, on 12th July, 2004 by Govt. of India (Karnataka – Goa Battalion NCC)

20. CONTRIBUTIONS TO KARNATAKA & KANNADA LANGUAGE

- I. BOOKS IN KANNADA ON SCIENCE & GENERAL
 - (1) Putanigala Vignana Padyagalu (Poems in Kannada based on Science for children), Received Karnataka Sahitya Award in 1986
 - (2) Engineering Gethegalu (Technological Poems in kannada) (1980)
 - (3) Vignana Vachanagalu (Vachanas in Kannada) (1984)
 - (4) Pattedari Padyagalu (Truth-seeking poems in Kannada) (1989)
 - (5) Computer (Introductory book in Kannada) (1987)
 - (6) Samparka Madhyamagalu (Book on Electronic Communication in Kannada) (1999)
 - (7) Computer kaliyiri (in Kannada) (1995)
 - (8) Acchagannada Nudikosha (Edited) (1995)
 - (9) Baduku..Belaku..Chutuku-I (in Kannada) (2009)
 - (10)Baduku Belaku Chutuku- II (In Kannada) (2011)
 - (11) Samagra Achagannada Kavya (In Kannada) (2013)
- II. KANNADA SOFTWARE DEVELOPMENT:
 - (1) Chief Adviser, Development of Kannada Software “Kuvempu Kannada Tantramsha” of Kannada University, Hampi , 2007;
 - (2) Chairman, Kannada Software Dvlp. Committee, Govt. of Karnataka.
- III. EDITOR OF KANNADA DICTIONARY:
 - (1) “Accha Kannada Nudikosha” (Dictionary of Classical Kannada), 513 Pages. (2)Editor, Samagra Achagannada Kavya
- IV. PRESIDENT, PRAPRATHAMA KANNADA GANAKA SAMMELANA:
 - (1) First President of Kannada Computer Conference organized by Kannada Sahitya Parishat, & Ganaka Parishat in Bangalore on 19,20, August, 2006.
- V. NEW INITIATIVES AT UNIVERSITY LEVEL IN KARNATAKA: As Vice-Chancellor of Kuvempu University, initiated the following:
 - (1) Choice Based Credit System (CBCS) at Post-graduate Level.
 - (2) Semester System at Under-graduate Level.

21. COUNTRIES VISITED:

USA, Canada, Japan, Singapore, UK, Australia, France, Germany, Italy, Spain, Switzerland, Sri Lanka, Norway, Denmark, Sweden, Benelux, Mauritius, Malaysia, China, South Korea.

Names of Guest Faculty

- Ms. Manjula K
 - M.Sc. Computer Science from Mangalore University
- Mrs. Amrithkala Bhandary
 - M.Sc. Computer Science from Mangalore University
- Ms. Jayashree
 - M.Sc. Computer Science from Mangalore University
- Mr. Sukumar Narayan
 - MCA from VTU

- Mrs. Archana
 - M.Sc. Computer Science
 - UGC-NET qualified