Government Arts college (Autonomous), Coimbatore –18

Performance - Teacher Appraisal Report

i) General Information

a) Name : Dr.K.ARTHI

b) Address (Residential) : 3/1,2 Lakshmi Garden,

kondayampalayam(via),Coimbatore -641110

c) Designation : Assistant Professor

d) Department : PG and Research Department of

Computer Applications

e) Date of Birth : 03/05/1976

f) Area of Specialization : Soft Computing, Evolutionary Algorithms, Fuzzy Cognitive Maps

A) Academic Qualifications

Examination passed	Board / university	Subject	Year	Division grade/merit etc.,
SSLC	Board of Secondary Education , Tamilnadu	Tamil, English, Mathematics, science, social science	1991	FIRST
HSC	Board of Higher Secondary Education , Tamilnadu	Tamil, English, Physics, Chemistry, Biology, Mathematics	1993	FIRST
Under Graduate	BHARATHIAR	STATISTICS	1996	FIRST
Post Graduate	BHARATHIDASAN	MCA	1999	FIRST
Mphil	BHARATHIAR	COMPUTER SCIENCE	2004	Commended
PhD	ANNA UNIVERSITY,CHENNAI	COMPUTER SCIENCE	2010	Commended



ii) Research Experience & Training

Research stage	Title of thesis	University where the work was carried out.
M.Phil	An Analysis of Class Level Coupling Measure based on Interaction	BHARATHIAR
Ph.D	A Study on Identification of Autism using Soft Computing Techniques	ANNA UNIVERSITY,CHENNAI
No of Publications	25	
I.M.REVATHI 2.B.RAMYA 3.K.P.MALARKODI 4. D.THUTHI SARABAI 5. S.MAHESWARI		
Training(please specify)	-	

B) Research Projects carried out - NIL

S. No.	Title of the Project	Name of the Funding Agency	Duration	Remark s

C) Seminars, Conferences, Symposia Workshops etc. attended - REFER APPENDIX A

Name of the Seminars / Conferences / Symposia / Workshops etc	Name of the Sponsoring Agency	Place and Date

iii) Teaching Experience

	Name of University/	Duration		
Courses Taught	College/Institution	Period of employment From - To	Years of Experience	
UG/PG	KARPAGAM ARTS AND SCIENCE COLLEGE	10/06/1999 to 28/01/2002	2 years 7 months	
UG/PG	KARPAGAM COLLEGE OF ENGINEERING	28/01/2002- 16/05/2011	9 years 4 months	
UG/PG	RVS COLLEGE OF COMPUTER APPLICATIONS	25/05/2011- 27/05/2015	4 years	
UG/PG	L.R.G. college for women, Tiruppur	29/07/2015 - 19/11/2015	4 months	
UG/PG	Government Arts College (Autonomous), Coimbatore-18	20/11/2015 - TILL DATE	7 years 9 months	

Total Teaching Experience (in years and months):

a)	Under-graduate	20 yrs
b)	Post-graduate	24 Yrs 2 months
c)	Research	22 yrs

viii) Innovations/ Contributions in Teaching

a) Design of Curriculum:	Role as a member in BOS for various UG and PG courses to facilitate the students by incorporating recent trends in syllabus
b) Teaching methods:	using Projector display and Constructivist approach
c) Laboratory experiments :	Working with different open source softwares
d) Evaluation methods:	Formative Evaluation and conducting periodical tests

e) Preparation of resource material	Open educational resources and prepared E material for
including books, reading	MCA
materials, laboratory	
manuals etc.:	
f) Remedial Teaching / Student	Weak performance students are counseled for better
Counseling (academic):	results.
g) Any other:	-

IX) Research Contribution

a). PhD/M.Phil undergoing scholars

Sl. No	Name of the PhD/ M.Phil(PT/FT) Scholar	Name of the University	Broad Field	Registration Number	Year of registrati on
1	Dhakshin Saravanan	Bharathiar	Soft computing	CRE/CSC 21PDEC 1495/2022	2021

b). PhD/M.Phil Awarded

Sl.No	Name of the PhD/M.Phil (PT/FT) scholar	Name of the University	Title of the thesis	Year of registration of the scholar	Year of award of PhD
1	M.REVATHI PhD(PT)	KARPAGAM	Classification of Learning Disabilities using fuzzy cognitive maps and Artificial Immune systems	2011	2016
2	B.RAMYA CAT- B- PhD(PT)	BHARATHIAR	A multi feature based efficient disease identification from medical datasets using soft computing techniques	2012	2020
3	K.P.MALARKODI CAT-B-PhD(PT)	BHARATHIAR	An optimized Intuitionistic fuzzy cognitive map for identification of supporting factors of agricultural growth	2012	2022
4	D.THUTHI SARABAI CAT-B- PhD(PT)	BHARATHIAR	Automatic Breast cancer detection system using enhanced fuzzy cognitive map classifier	2012	2022
5	S.MAHESWARI CAT-B- PhD(PT)	BHARATHIAR	Waiting for VIVA	2012	-

X) Extension Work/ Community Service

- A) Please give a short account of your contribution to:
- **B**) Positions held / leadership role played in organizations linked with Extension Work National Service Scheme (NSS), or NCC or any other similar activity

C. Participation in Corporate Life

Please give a short account your contribution to:

a) College/ University / Institution	 Supporting all department activities with HOD along with College Internal exam Invigilation and paper evaluation NAAC Department coordinator Central library Auditing work, Admission work – MCA, Department Library Incharge, AICTE web portal work Department Library Incharge
b) Co-curricular Activities	-
c) Enrichment of Campus Life (Hostels, sports, games, cultural	Participated in sports event conducted in campus
d) Students Welfare and Discipline	Motivated students to maintain decorum inside the campus.
e) Membership / Participation in Bodies	BOS member in MCA department
f) Professional Organization of Teachers	-

D.(a) Membership of Professional Bodies, Societies, Editorship of Journals etc.

- Life member of ISTE
- Reviewer of the International Journal of Gastroenterology(Springer Publications) and
- Reviewer of the International Journal of Decision Support Systems and E Commerce (Elsevier Publications)

E. Any other information : Member of college E-governance team

(Signature of the Teacher) (Dr.K.ARTHI)

Appendix A

JOURNAL PUBLICATIONS (National and International with impact factor)

- 1. K.Arthi and A.Tamilarasi "Prediction of autistic disorder using neuro fuzzy system by applying ANN technique" International Journal of Developmental Neuroscience, Elsevier Publications, Vol.26, No.7, pp.699-704, 2008(Impact Factor 2.418).
- 2. K.Arthi and A.Tamilarasi "A Hybrid Fuzzy model in prediction of ADHD using Artificial Neural Networks" International Journal of Information technology and Knowledge Management, Vol. 2, No. 1, pp. 209-215, 2009.
- 3. K.Arthi and A.Tamilarasi "An Approach to Diagnose Neurological Disorder Using Neuro Fuzzy Model", Journal of Computer Science, Vol. 2, Issue 3, pp. 601-607, 2008.
- 4. K.Arthi and A.Tamilarasi "Enhancing performance of K-NN and Neural classifiers in classifying autistic disorder using fuzzy membership values "National Journal of Technology, Vol 5,No 3,pp.39-46,Sep 2009.
- 5. K.Arthi and A.Tamilarasi "A comparison of Neural Network and k-Nearest Neighbour Techniques in classifying autistic disorder" International Journal of Intelligent Information Processing pp.109-115,Vol4,No 1, Jan-June 2010.
- 6. K.Arthi, A.Tamilarasi and Elpiniki I. Papageorgiou "Analyzing the performance of Fuzzy Cognitive Maps with non linear hebbian learning algorithm in predicting autistic disorder", International Journal of Expert Systems with Applications, (Impact Factor 2.908). Volume 38, Issue 3, March 2011, Pages 1282-1292.
- 7. Elpiniki I. Papageorgiou and K.Arthi "Fuzzy Cognitive Map ensemble learning paradigm to solve classification problems: application to autism identification" International Journal of Applied soft computing Elsevier Publications, Volume 12, Issue 12, Dec2012, pages 3798-3809.(IF=2.612)
- 8. Elpiniki I. Papageorgiou and K.Arthi "A comparative analysis on prediction capabilities of Hebbian-based, evolutionary-based and hybrid methods for learning Fuzzy Cognitive Maps Application to autistic disorder problem", under minor revision in IEEE Trans on SMC Part C (IF=2.016)
- 9. Elpiniki I. Papageorgiou and Arthi Kannappan"Bagged Nonlinear Hebbian Learning Algorithm for Fuzzy Cognitive Maps Working on Classification Tasks". Proceedings of Artificial Intelligence: Theories and Applications 7th Hellenic Conference on AI, SETN 2012, Lamia, Greece, May 28-31, 2012.
- 10. Elpiniki I. Papageorgiou, Panagiotis Oikonomou and Arthi Kannappan: Book chapter in Artificial Intelligence: Theories and Applications. Lecture Notes in Computer Science 7297 Springer 2012, volume 7297/2012, pages 157-164, DOI: 10.1007/978-3-642-30448-4_20, ISBN 978-3-642-30447-7.
- 11. Anitha V, Suresh Kumar M and K. Arthi "Neural Networks and its Applications in medical field " International Journal of Embedded Systems and Computer Engineering, Vol. 3, No. 2, JulyDecember 2011.

- 12. Arthi Kannappan and Elpiniki I. Papageorgiou "A new classification scheme using Artificial Immune Systems for Fuzzy Cognitive Map Learning ",FUZZ-IEEE 2013, IEEE International Conference on Fuzzy Systems, Hyderabad, India, 7-10 July, 2013, Proceedings. IEEE 2013 ISBN 978-1-4799-0020-6.
- 13. D. ThuthiSarabai and Dr.K. Arthi," A Study on the Symptoms of Carcinoma (Breast Cancer) Using Fuzzy Cognitive Maps (FCMs) CiiT international Journal on Fuzzy systems, Vol 6, No 2 (2014).
- 14. B.Ramya, Dr.K.Arthi, Somasundaram "A review study on Artificial Immune System and its Applications" International Journal of Emerging Technologies in Computational and Applied Sciences (IJETCAS) 7(1), 2014, pp. 271-275.
- 15. M.Revathi and Dr.K.Arthi, "Application of Artificial Immune System Algorithms in Dataset Classification", International Journal of Innovative Research in Advanced Engineering , vol 1,Issue 6, July 2014.
- 16. K.P.Malarkodi and Dr.K.Arthi (2016). Vintage Prediction in Arachis hypogaea using fuzzy cognitive map and multi objective firefly algorithm; International Conference on Interdisciplinary Research Studies in Computer Science, Biosciences and Electronics; ISBN: 978-93-80800-64-6; Malaysia on 29.11.2016 & 30.11.2016
- 17. B.Ramya, Dr.K.Arthi (2018) Intensive Disease Support Measure Based Efficient Disease Prediction Using Artificial Neural Network, International Journal of Pure and Applied Mathematics, Volume 120 No. 5 2018, 1441-1458.
- 18. B.Ramya, Dr.K.Arthi (2018) Multi feature malignant weight-based mammogram classification with ANN using fuzzy rules, International Journal of Engineering & Technology, 7 (4) (2018) 4813-4818.
- 19.S.Maheswari and Dr.K.Arthi Sarcasm Revealing using Rule Based Algorithm, International Journal of Innovative Technology and Exploring Engineering (IJITEE), ISSN: 2278-3075, Volume-9 Issue-5, March 2020(Scopus).
- 20. S.Maheswari and Dr.K.Arthi, Rule Based Morphological Variation Removable Stemming Algorithm, International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-8 Issue-4, November 2019(Scopus)
- 21. S.Maheswari and Dr.K.Arthi, Enhanced Sentiment Analysis of Informal Textual Communication in Product Evaluation by Using Lexicon Based Approach, Alochana Chakra Journal, Volume IX, Issue IV, April/2020 ISSN NO:2231-3990(UGC Care List)
- 22. K.P.Malarkodi and Dr.K.Arthi, Utilization of Soft Computing Approaches for Prophecy of Crop Consummation, International Journal of Scientific Research in Computer Science Applications and Management Studies, VOL 7,Issue 4 (July 2018).
- 23. K.P.Malarkodi and Dr.K.Arthi An optimized enhanced Intuitionistic fuzzy cognitive maps for groundnut yield prediction, International Journal of Engineering & Technology, VOL 7,ISSUE 4,2018.
- 24. K.P.Malarkodi and Dr.K.Arthi ,An enriched multi-goal evolutionary algorithm and intuitionistic fuzzy cognitive maps for prediction of crop yield, ARPN Journal of Engineering and Applied Sciences, VOL13,ISSUE 23, ISSN 1819-6608,2018.

25. K.P.Malarkodi and Dr.K.Arthi, Vintage Prediction in Arachis Hypogaea using Fuzzy Cognitive Map and Multi Objective Firefly Approach, International Journal of Computer Science and Mobile Computing, 2017, pg. 453-458, Vol 6,Issue 5, ISSN 2320–088X

Project Fund/Grants:

- Coordinated and received seminar grant (RS 50,000) from AICTE for Conducting National Level seminar in MCA Department at RVS College of Computer Applications in the year 2013.
- Received seminar grant from DST and DRDO for Conducting National Level Conference in MCA Department at Karpagam College of Engineering in the year 2011.

PAPERS PRESENTED – International / National Conferences National:

- "Data Mining Web Mining A Web Analyst Overview" at UGC Sponsored National Conference on Distributed Database & Computing conducted by Dept of Computer Science at Gobi Arts & Science College, Gobichettipalayam on 28 & 29th Mar 2004
- "Data Warehousing Framework" at UGC Sponsored National Conference on Distributed Database & Computing conducted by Dept of Computer Science at Gobi Arts & Science College, Gobichettipalayam on 28 & 29th Mar 2004
- "A framework of fruition of CPN over Process Modeling" at UGC Sponsored National Conference on Networking & Multi Agent Systems conducted by Dept of Computer Science at Gobi Arts & Science College, Gobichettipalayam on 25th & 26th Sep 2004.
- "Data Structures for Spatial Databases" at UGC Sponsored National Conference on Networking & Multi Agent Systems conducted by Dept of Computer Science at Gobi Arts & Science College, Gobichettipalayam on 25th & 26th Sep 2004.
- "An Approach to diagnose Autistic Spectrum Disorders Using Neuro Fuzzy Model" at UGC Sponsored National Conference on Distributed Networks conducted by Dept of Computer Science at Gobi Arts & Science College, Gobichettipalayam on 26th & 27th March 2005.
- "Feature RDBMS" National Conference on " Recent Advances in Computer Vision and Information Technology ", at Government College of Technology on 8-9, March 2007
- "A Fruition of EM Algorithm in Soft Clustered Distributed Environment" at National level conference conducted by Bharathiar University on Feb 2007.
- "A fruition of EM Algorithm in Soft clustered Distributed environment "National seminar held at the University on 6th and 7th Mar 2007. "Link status monitoring using simple network management protocol for leased line circuit "in the National seminar held at the University on 6th and 7th Mar 2007.
- "NETSPY" National conference on soft computing ,Image Processing, Network and Management held during 25th -26th Mar 2009.
- "Cross Platform Integration tool for Access monitoring and control of linux and windows through JAVA "National conference on soft computing, Image Processing, Network and Management held during 25th -26th Mar 2009.

- "Intelligent Phishing website detection system using fuzzy techniques." National conference on soft computing ,Image Processing, Network and Management held during 25th -26th Mar 2009.
- "A study on Neural Network and K Nearest Neighbour Techniques in Classification " National Conference on Cloud Computing, Image Processing and Network Management held during 25- 26th Mar2010
- "Steganography for Audio, Video Images using MD5 Algorithm" National conference on Soft computing, Image Processing and Network Management held during 27th -28th Mar 2008.
- "A review of Intelligent agents in civilizing the Fruition of ANN" National conference on Soft computing ,Image Processing and Network Management held during 27th -28th Mar 2008
- "Enhancing search performance in Unstructured P2P Networks" National conference on cloud computing ,Image Processing and Network Management held during 25th -26th Mar 2010.
- "Watermarking relational databases using optimization based techniques " National conference on cloud computing, Image Processing and Network Management held during 25th 26th Mar 2010.
- "Personnel Authentication using Iris Texture Analysis" National conference on cloud computing ,Image Processing and Network Management held during 25th -26th Mar 2010.
- "IMINE: Index support for Itemset mining" National conference on cloud computing, Image Processing and Network Management held during 25th -26th Mar 2010.
- "A study on Neural Network and K Nearest Neighbour Techniques in Classification" National conference on cloud computing ,Image Processing and Network Management held during 25th 26th Mar 2010.
- Arthi Kannappan and Elpiniki I. Papageorgiou "A new classification scheme using Artificial Immune Systems for Fuzzy Cognitive Map Learning ",FUZZ-IEEE 2013, IEEE International Conference on Fuzzy Systems, Hyderabad, India, 7-10 July, 2013