BIO-DATA

General Information:

Dr. Ananthanarayana V.S.,

Professor (HAG)

Dept. of Information Technology,

National Institute of Technology Karnataka, Surathkal, P.O. Srinivasnagar, Pin: 575 025

Scopus Id: 23396223700

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Education:

Degree	University/Institution
Post Doctoral Fellow	Memorial University of Newfoundland, Canada
Ph. D	Indian Institute of Science, Bangalore
M.E.(Computer Science and Engg)	Indian Institute of Science, Bangalore
B.E.(Computer Science and Engg)	Karnatak University, Dharawad

Awards and Recognitions:

- 1. **Secured Ist rank** in IInd year B.E, 2nd rank in 3rd year B.E and 4th year B.E. to the Karnatak University.
- Received **Distinguished Service Award** from NITK, Surathkal during Golden Jubilee Celebrations, August, 2010.
- 3. Honored as **Outstanding Alumni** for the remarkable progress as an academician by Basaveshwar Engineering College during Silver Jubilee Celebrations of Computer Science and Engineering Department on 19 21st, February 2011.
- 4.**Best Paper Award:** For the paper, "Delivering LBA with LBS using Service Oriented Architecture" In International Symposium for Cloud and Services Computing (ISCOS) 2012, Dec 17 18, 2012, NITK, Surathkal, pg 70 75.
- 5.Best Paper Award: For the paper, "EfficientTreeMiner: Mining Frequent Induced Substructures from XML Documents without Candidate Generation", In the Proc. of 14th International conference on Advanced Computing and Communication (ADCOM-2006), pp: 541- 546, Dec 2006, India.
- 6.**Best Paper Award:** For the paper, "Extraction and optimization of Fuzzy association rules using Multi-objective Genetic Algorithm", In the Proc. of International Conference on Bioinformatics and diabetes melitus (ICBDM 2006), pp. 121-128, March 2006.

7. The PhD thesis supervised by me bagged BITES **Best PhD Thesis Award** for the year 2009 in the category of "Computer Science & Engineering", 2010.

Research Area:

Data Mining, Distributed Computing, Web Services, Databases, Big Data, Semantic Web

Professional Experience:

Employer	Position Held	Date of Joining	Date of Leaving
N.I.T.K. Surathkal	Professor (HAG)	24-10-2018	To date
N.I.T.K. Surathkal	Professor	09-4-2005	23-10-2018
N.I.T.K.(formerly K.R.E.C) Surathkal	Asst. Professor	09-4-1997	08-4-2005
N.I.T.K. (formerly K.R.E.C) Surathkal	Lecturer	18-6-1990	08-4-1997
K.R.E.C, Surathkal	Temp. Lecturer	1989	1990
Teaching Experience		31 Years	
Research Experience (Post-Ph.D.)		19 Years	

Research Guidance:

SI.No	Thesis Title	Scholar Name	Status	Guidance
1.	Abstraction Based Efficient Algorithms for Clustering Large Datasets	Mrs. Radhika M Pai	Completed	Single Principal Supervisor
2.	Abstraction and Knowledge based Mining of Interdatabase Association Rules	Mrs. Santhi Thilagam	Completed	Single Principal Supervisor
3.	A QoS Broker Based Architecture for Dynamic Web Services and Compositions	Mr. Demian Antony D'Mello	Completed	Single Principal Supervisor
4.	Abstraction Based Mining of Quantitative Association Rules	Mr. Preetham Kumar	Completed	Single Principal Supervisor
5.	Decentralized Registry Based Web Services Architecture For Location Based Services	Mr. Melwyn D'Souza	Completed	Single Principal Supervisor
6.	Web UR: Effective Techniques for Web Usage Mining and Recommender System	Mrs. Poornalatha	Completed	Joint Supervisor
7.	DWDS: A Scalable, Context- Aware Framework for Distributed Web Service Discovery using Semantics	Mrs.Sowmya Kamath S	Completed	Single Principal Supervisor

	8.	Effective Multimedia Document Representations for Knowledge Discovery	Mrs. Pushpalatha K	Completed	Single Principal Supervisor
	9.	Design and Development of Trusted Semantic Framework for Context Aware Sensor Driven Pervasive Environment	Mr. Karthik N	Completed (June 2020)	Single Principal Supervisor
	10.	An Efficient Framework for Information Retrieval From Linked Data	Mr. Sakti Murugan R	Completed (Feb 2021)	Single Principal Supervisor
	11.	An Efficient MapReduce Scheduler	Mr. Rathinaraja J	Completed (June 2020)	Single Principal Supervisor
	12.	A Framework for Efficient Clinical Recommendation System in Health Sector	Mr. Shashank Shetty	In Progress	Single Principal Supervisor
	13.	Area: Machine Translation	Mr. Richard Saldanha	In Progress	Joint Supervisor
Ĺ	14.	Area: NLP & Data Analytics	Mrs. Reshma U	In Progress	Joint Supervisor

Publications (SCOPUS/WoS Indexed):

International Journals: 38
 International Conferences: 95
 Publications details, refer Annexure A

Sponsored Research Projects:

Principal Investigator:

1. Distributed Computing and Web Services, Duration: 3 1/2 Yrs from March 2007, Budget: 5 Lakhs, Agency: Start-up grant, NITK

2. Knowledge discovery in multi- Databases, Duration: 3 1/2 Yrs from Feb 2004, Budget: 8 Lakhs, Agency: MHRD, GOI

Co-investigator:

1. Graphics system design (Development of Graphics Lab), Duration: 3 Yrs from 1993, Budget: 6 Lakhs

Other Projects:

 Special Project by MHRD: Centralized Counselling for MTech/M.Des/M.Arch Admissions, 2016.

Duration: 1 Year

Budget: Rs.5 Crore

Role: Technical Committee Convener

2. Special Project by NITK Surathkal: Academic Centric Student Information System (2017)

Duration: 2 Years Budget: Rs. 53,68,000 Role: Convener

3. Special Project: Visvesvaraya PhD Scheme for Electronics & IT (since 2017)

Duration: 5 Years

Budget: Rs. 1009.2516 Lakhs

Agency: Media Lab Asia under Ministry of Electronics and IT, Gol

Role: Convener/ Nodal Officer

4. Automated DASA Admission Process 2014, 2019, 2020

Budget: Rs. 20 Lakhs/~Rs. 2Cr

Agency: MHRD

Role: Technical Committee Member

Administrative Positions:

Period	Organization with	Department	Designation	Specific work
(Month and	address			carried out
Year)				
Oct 2018 – Till Date	N.I.T.K., Surathkal	N.I.T.K., Surathkal	Deputy Director	Institute level Administration
2018 – Till Date	N.I.T.K., Surathkal	MIS	Chairman	Institute level MIS
Sept 2016 – Dec 2018	N.I.T.K., Surathkal	N.I.T.K., Surathkal	Dean (Research & Consultancy)	Institute Research & Consultancy Work Administration
Aug 2012 - Aug 2015	N.I.T.K., Surathkal	Information Technology	Professor & Head	Head of the Department
April 2006 - Sept 2009	N.I.T.K., Surathkal	Information Technology	Professor & Head	Head of the Department
July 2002 - July 2004	N.I.T.K., Surathkal	Information Technology	Head	Head of the Department
Jan 2010 - Aug 2012	N.I.T.K., Surathkal	Central Computer Centre	Chairman	Common computing facility administration for N.I.T.K
Sept 2009 - Aug 2012	N.I.T.K., Surathkal	Health Care Centre	Chairman	Heath care facility administration for N.I.T.K
Feb 2003 - July 2004	N.I.T.K., Surathkal	IGNOU Study Centre (1315P)	Program - in - Charge	Administrative duties of IGNOU study centre

Professional & Outreach Activities:

- 1. Organizing Chair, Program Chair, Publication Chair, Advisory Committee Member, Program Committee Member for several conferences.
- 2. Board of Studies member, Academic auditor, Selection committee member, Doctoral committee member for Computer Science discipline for many Institutions
- 3. National Board Accreditation (NBA) expert member for Information Technology and Computer Science discipline
- 4. Organized many workshops and FDP programs in recent areas of Information Technology
- 5. Delivered many invited talks, special lectures in the area of data mining, distributed computing and web services.

For more details about For more details on out	professional activities, refer Annexure B reach activities, refer Annexure C	
To more detaile on our	asarrass, reier y annexare e	

Annexure A

Publications (Detail):

International Journal Publications (38):

- "Multi-Dimensional Semantic Clustering of Large Databases for Association Rule Mining", Ananthanarayana, V.S., Narasimha Murty, M., Subramanian, D.K. Pattern Recognition Journal, Vol 34, Issue 4, 2001, 939 - 941. http://www.sciencedirect.com/science/article/pii/S003132030000128X
- "An Incremental Data Mining Algorithm for Compact Realization of Prototypes", Ananthanarayana, V.S., Narasimha Murty, M., Subramanian, D.K. Pattern Recognition Journal, Vol 34, Issue 11, 2001. pg 2249 – 2251. http://www.sciencedirect.com/science/article/pii/S0031320301000280
- "Efficient Clustering of Large Data Sets", Ananthanarayana, V.S., Narasimha Murty, M., Subramanian, D.K., Pattern Recognition Journal, Vol 34, Issue 12, 2001. pg 2561 – 2563. http://www.sciencedirect.com/science/article/pii/S0031320301000978
- "Tree Structure for Efficient Data Mining Using Roughsets", Ananthanarayana, V.S., Narasimha Murty, M., Subramanian, D.K., Special Issue on Roughsets, Pattern Recognition and Data Mining of Pattern Recognition Letters, Vol.24, No. 6, 2003. pg 853 – 862. http://www.sciencedirect.com/science/article/pii/S0167865502001976
- "Knowledge-Based Association Rule Mining Using AND-OR Taxonomies", Ananthanarayana, V.S., Narasimha Murty, M., Subramanian, D.K., Knowledge Based Systems, Vol. 16, 2003. pg 35 – 45. http://www.sciencedirect.com/science/article/pii/S0950705102000503
- Scalable, Distributed and Dynamic Mining of Association Rules"
 V.S. Ananthanarayana, D.K Subramanian, M. Narasimha Murty.
 Lecture Notes in Computer Science, Vol. 1970, Yr 2000, Publisher: Springer- Verlag. Pg 559 566.
 http://link.springer.com/chapter/10.1007%2F3-540-44467-X_51
- "Binding and Execution of Web Service Compositions"
 Vidyasankar K., Ananthanarayana V.S.
 Lecture Notes in Computer Science, Vol.3806, Yr 2005, Publisher: Springer. Pg 258 272. http://link.springer.com/chapter/10.1007%2F11581062 20#page-1
- 3. "Dynamic Primary Copy with Piggy-backing Mechanism for Replicated UDDI Registry "Ananthanarayana V.S., Vidyasankar K.

 Lecture Notes in Computer Science, Vol. 4317, Yr 2006, Publisher Springer. Pg 389 402. http://link.springer.com/chapter/10.1007%2F11951957_34#page-1
- "Extraction and optimization of Fuzzy Association Rules using Multi-objective Genetic Algorithm"
 P.Santhi Thilagam, Ananthanarayana VS.
 Pattern Analysis and Applications, Vol 11, Issue 2, Yr. 2008, Pg 159 - 168, Springer. http://link.springer.com/article/10.1007/s10044-007-0090-x
- 10. "Meta-Tree based Mining of XML documents for frequent induced subtrees" P.Santhi Thilagam, Ananthanarayana VS.,

International Journal of Information Processing, ISSN 0973-8215, Vol 2, Issue 1, Pg. 89 -99, 2008.

http://www.ijipbangalore.org/accepted.php

11. "An abstraction based communication efficient distributed association rule mining "P.Santhi Thilagam, Ananthanarayana VS.,

LNCS series (Vol. 4904) by Springer Verlag, ISBN 0302-9743, 2008, Pg 251 – 256. http://link.springer.com/chapter/10.1007%2F978-3-540-77444-0 23#page-1

12. "Discovery of Frequent Itemsets Based on Minimum Quantity and Support" Preetham Kumar, Ananthanarayana V.S.,

International Journal of Computer Science and Security IJCSS, Vol.3, issue 3, Pg 216 - 225, 2009.

http://www.cscjournals.org/library/manuscriptinfo.php?mc=IJCSS-86

13. "Semantic web service selection based on service provider's business offerings" Demian Antony D'Mello, VS Ananthanarayana

International Journal of Simulation: Systems, Science and Technology Vol. 10, Issue 2, Pg. 25-37, 2009.

http://ijssst.info/Vol-10/No-2/paper3.pdf

"Quality and Business Offer Driven Selection of Web Services for Compositions"
 Demian Antony D'Mello, VS Ananthanarayana
 Communications in Computer and Information Science (CCIS), Vol 31, Springer-Verlag
 Berlin Heidelberg 2009, pg 76 - 81, 2009

15. "Dynamic Selection Mechanism for Quality of Service Aware Web Services" Demian Antony D'Mello, Ananthanarayana V.S.,

International Journal on Enterprise Information System, Vo1 1, No. 4, Feb 2010, pg 23 - 60, Taylor & Francis, ISSN 1751 – 7575 print / ISSN 1751 – 7583 online. http://www.tandfonline.com/doi/abs/10.1080/17517570903159467

16. "Frequent Term Based Clustering of Stories with Semantic Analysis for Searching and Retrieval"

Amrut Nagasunder, Bharat B, Madhu Venkatesh, Ananthanarayana V.S. International Journal of Advanced Research in Computer Science (IJARCS), Vol. 1, No. 3, 2010, pg 219-227, ISSN No. 0976-5697.

http://www.ijarcs.info/?wicket:bookmarkablePage=:com.genxcellence.journal.pharmacy.web.issue.ArchivesIssueList

17. "The Broker Based Dynamic Web Service Selection Mechanism to Handle a Large Volume of Requests"

Demian Antony D'Mello, Ananthanarayana V.S.,

International Journal of Information Processing (IJIP), Vol. 3, No. 2, pg 24 - 36, 2010. http://www.academia.edu/10011468/The_Broker_Based_Dynamic_Web_Service_Selection_Mechanism_to_Handle_a_Large_Volume_of_Requests

18. "A Review of Dynamic Web Service Composition Techniques"
Damian Antony D'Mello, V.S Ananthanarayana, Supriya Salian
Communications in Computer and Information Science (CCIS), Vol. 133, Springer-Verlag
Berlin Heidelberg 2010, pg 85 – 97, 2010.
https://link.springer.com/chapter/10.1007/978-3-642-17881-8_9

19. "An Efficient Mining of Dominant Entity Based Association Rules in Multi-Databases" Ananthanarayana V.S.

Communications in Computer and Information Science (CCIS), Vol. 154, Springer-Verlag Heidelberg 2011, pg 91 – 100, 2011.

http://link.springer.com/chapter/10.1007%2F978-3-642-21153-9_9

20. "Service Offer Driven Dynamic Selection Mechanism for Web Services" Demian Antony D'Mello, Ananthanarayana V.S., International Journal of Web Sciences (IJWS), Vol. 1, Issue 1-2, DOI: 10.1504/IJWS.2011.044084, August 2011. http://www.inderscienceonline.com/doi/abs/10.1504/IJWS.2011.044084

21. "Effective web service description and dynamic discovery mechanism based on the functional semantics" Demian Antony D'Mello, VS Ananthanarayana International Journal of Web Science, Volume 1, Issue 4, Pages 332-367, 2012.

http://www.inderscienceonline.com/doi/abs/10.1504/IJWS.2012.052534

- 22. "Review of QoS Driven Optimal Selection of Web Services for Compositions" Demian Antony D'Mello, V.S. Ananthanarayana Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering (LNICST), Vol 85, pg 553-562, 2012. https://link.springer.com/chapter/10.1007/978-3-642-27308-7 59
- 23. "A novel Multi-Threaded K-Means clustering approach for intrusion detection" VS Ananthanarayana, V Pathak, Journal: Software Engineering and Service Science (ICSESS), Page 22-24, 2012. http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=6269577
- 24. "Semantic Web Services Discovery, Selection and Composition Techniques" Sowmya Kamath, V.S. Ananthanarayana International Journal of Computer Networks and Communications, pg 151 - 158, 2013. DOI: 10.5121/csit.2013.3616.
- 25. "Enhanced LBS Discovery in a Decentralized Registry Based Web Services Environment" Melwyn D'Souza and V.S. Ananthanarayana Journal on Web Engineering (JWE) 2014, Rinton Press (Princeton, New Jersey), Vol. 1 & 2, ISBN: 1540-9589. http://www.rintonpress.com/xiwe13/iwe-13-12/001-023.pdf
- 26. "A Bio-inspired, Incremental Clustering Algorithm for Semantics based Web Service Discovery"

Sowmya Kamath, Ananthanarayana V.S.

Special Issue on "Soft Computing and Intelligent Information Systems" of the International Journal of Reasoning-Based Intelligent System (Inderscience Journal), Vol. 7, No. 3/4, pg. 261 - 275, 2015.

http://www.inderscience.com/offer.php?id=72953

27. "Semantic Similarity based Context-Aware Web Service Discovery using NLP Techniques" Sowmya Kamath, Ananthanarayana V.S. Journal on Web Engineering (JWE), Rinton Press (Princeton, New Jersey), Vol. 15, Issue 1&2, pg. 110 - 129, (ISSN 1540-9589) 2015. http://www.rintonpress.com/xjwe15/jwe-15-12/110-139.pdf

28. "Feature Pattern Based Representation of Multimedia Documents for Efficient Knowledge Discovery "

Pushpalatha K, Ananthanarayana V.S.

MULTIMEDIA TOOLS AND APPLICATIONS, pg. 1 - 27, DOI: 10.1007/s11042-016-3434y,2016.

http://link.springer.com/article/10.1007%2Fs11042-016-3434-v

29. "Discovering Composable Web Services based on Functional Semantics and Service Dependencies using Natural Language Requests"

Sowmya Kamath, Ananthanarayana V.S.

Information Systems Frontiers - Springer International Journal (ISSN: 1387-3326 (Print) 1572-9419 (Online)), pp 1–15, 2016.

https://link.springer.com/article/10.1007/s10796-017-9738-2

30. "Semantic based Web Service Classification using Morphological Analysis and Ensemble Learning Techniques"

Sowmya Kamath, Ananthanarayana V.S.

International Journal on Data Science and Analytics, Springer Hiedelberg, ISSN:2364-4168, December 2016. Volume 2. Issue 1–2. pp 61–74 2016

https://link.springer.com/article/10.1007/s41060-016-0026-x

31. "A Tree based Representation for Effective Pattern Discovery from Multimedia Documents" Pushpalatha K, Ananthanarayana V S.

Pattern Recognition Letters, Volume 93, 1 July 2017, Pages 143-153 http://www.sciencedirect.com/science/article/pii/S0167865516302707

32. "A Hybrid Trust Management Scheme for Wireless Sensor Networks" Karthik N, Ananthanarayana V.S.

International Springer Journal on Wireless Personnel Communications, 2017, Vol. 96, page 1-34.

https://link.springer.com/article/10.1007/s11277-017-4772-4

33. "Context Aware Trust Management Scheme for Pervasive Healthcare"

Karthik N and V. S. Ananthanarayana

International Springer Journal on Wireless Personnel Communications, 2019, Vol. 105, Issue 3, pg: 725 - 763.

https://link.springer.com/article/10.1007/s11277-018-6091-9

https://doi.org/10.1007/s11277-018-6091-9

34. "Trust based Data gathering in Wireless Sensor Networks"

Karthik N and V. S. Ananthanarayana

International Springer Journal on Wireless Personnel Communications, 2019 (In Press)

DOI: 10.1007/s11277-019-06491-y

35. "WordCode using WordTrie"

Sakthi Murugan R., V.S. Ananthanarayana

Journal of Kind Saud University - Computer and Information Sciences (Elsevier Publications) https://doi.org/10.1016/j.jksuci.2019.05.011

36. Dynamic ranking-based MapReduce job scheduler to exploit heterogeneous performance in a virtualized environment

J. Rathinaraja, V. S. Ananthanarayana, and Anand Paul

The Journal of Supercomputing (Springer Journal)

https://doi.org/10.1007/s11227-019-02960-0

37. "Fine-grained data-locality aware MapReduce job scheduler in a virtualized environment" J. Rathinaraja, V. S. Ananthanarayana, and Anand Paul

Journal of Ambient Intelligence and Humanized Computing (Springer), **2020**. (SCIE and Scopus, IF: 1.9)

DOI: 10.1007/s12652-020-01707-7

38. Improving performance of MapReduce Scheduler for Heterogeneous Workloads in a Heterogeneous Environment

J. Rathinaraja, V. S. Ananthanarayana, and Anand Paul

Concurrency and Computation: Practice and Experience (Wiley), 2019. (SCIE and Scopus,

IF: 1.1)

DOI: 10.1002/cpe.5558

International Conferences (95)

And-Or Concept for Mining Generalized Association Rules"
 Ananthanarayana, V.S., Subramanian, D.K., Narasimha Murty, M.,
 International Conference on Knowledge Based Computer Systems, 2000. pg 70 – 81.

"Scalable, Distributed and Dynamic Mining of Association Rules"
 Ananthanarayana, V.S., Subramanian, D.K., Narasimha Murty, M.,
 International Conference on High Performance Computing, 2000, pg 559 – 566. [Acceptance ratio: 14/127 = 11%]
 http://link.springer.com/chapter/10.1007%2F3-540-44467-X_51

"Mining Multiple Databases for Inter-Database Association Rules"
 Ananthanarayana, V.S., Subramanian, D.K., Narasimha Murty, M.,
 International Conference on Knowledge Based Computer Systems, 2000. pg 58 – 69.
 [Acceptance ratio: 40/160 = 25%]
 https://books.google.co.in/books?isbn=8177641107

4. ``Dynamic Data Mining"
Ananthanarayana, V.S., Narasimha Murty, M., Subramanian, D.K.,
Int. Conf. on Knowledge Based Computer Systems, 2002. pg 47 – 57.

"Association Rule Mining Activity: A General Formalism"
 Ananthanarayana, V.S., Narasimha Murty, M., Subramanian, D.K.,
 International Conference on Computer, Communication and Control
 Technologies (CCCT'03) and 9th International Conference on Information System Analysis and Synthesis (ISAS'03), 2003. pg 173 – 178.

 "Binding and Execution of Web Service Compositions" Vidyasankar K., Ananthanarayana V.S
 6th International Conference on Web Information Systems Engineering, November 2005, NY, USA. http://link.springer.com/chapter/10.1007%2F11581062 20

 "Node Set Partitioning Algorithm (NSP) for Efficient Mining of Association Rules in Distributed Databases"
 P.Santhi Thilagam , Ananthanarayana VS.,
 Punjab technical education, International Conference on Emerging Trends in IT Industry (ICET-2004), Nov 27, 2004, Ludhiana.

8. "Association Rule Mining in Distributed Databases"
P.Santhi Thilagam, Ananthanarayana VS.,
International Conference on Emerging Technology, 21-24th December 2004, Bhubaneswar.

"Mining Frequent Sub trees from XML Documents"
 P.Santhi Thilagam, Ananthanarayana VS.,
 13th International Conference on Advanced Computing and Communications", 2005

"Quantitative Association Rule Mining"
 Preetham Kumar, Ananthanarayana V.S
 International Conference on Intelligent Systems, Dec 1 – 3, 2005, Malaysia.

11. ``Distributed and Incremental Association Rule Mining using SPC Tree"
P.Santhi Thilagam, Ananthanarayana VS.,
International Conference on Resource Utilization and Intelligent Systems (INCRUIS 06),
Erode. January 4 – 6, 2006.

12. ``ETreeMiner: An efficient approach for mining frequent induced subtrees without candidate generation"

Srividya Karumuri, Santhi Thilagam P, Ananthanarayana VS., International Conference on Data Mining. June 26-29, 2006, Las Vegas, USA.

13. `` Analysis of Mobile Beacon aided In-Range Localization scheme in Ad Hoc Wireless Sensor Networks"

Anil Kumar Katti, Srinath T.V., Ananthanarayana VS

Proceedings of International Conference on Wireless Communications and Mobile Computing Conference, July 3 – 6, 2006, (IWCMC'06) Vancouver, CANADA, pg: 1159 – 1164.

dl.acm.org/ft gateway.cfm?ftid=364165&id=1143782

14. ``Mining n-Dimensional Quantitative Association Rules Using Bintree Approach" Preetham Kumar, Ananthanarayana V.S 3rd International Conference on Artificial Intelligence in Engineering and Technology (ICAIET – 2006), Nov 22 – 24, 2006, Sabah, Malaysia, pg: 394 – 398.

15. "Dynamic Primary Copy with Piggy-backing Mechanism for Replicated UDDI Registry " Ananthanarayana V.S., Vidyasankar K. 3rd International Conference on Distributed Computing and Internet Technology (ICDCIT-2006), Dec 20 – 23rd, 2006, Bubhaneswar (India), pg: 389 – 402. http://link.springer.com/chapter/10.1007%2F11951957_34#page-1

16. "EfficientTreeMiner: Mining Frequent Induced Substructures from XML Documents without Candidate Generation "

Santhi Thilagam, P., Ananthanarayana V.S.

14th International Conference on Advanced Computing and Communication (ADCOM 2006), Dec 20 -23rd, 2006, Surathkal, (India), pg: 541 – 546.

http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=4289951&tag=1

17. "Efficient Mining of Frequent Rooted Continuous Directed Subgraphs" Sreenivasa G.J., Ananthanarayana V.S.

14th International Conference on Advanced Computing and Communication (ADCOM 2006), Dec 20 - 23rd, 2006, Surathkal, (India) pg: 553 – 558. http://ieeexplore.ieee.org/xpls/abs_all.isp?arnumber=4289953

18. "A Novel Data Structure for Efficient Representation of Large Data Sets in Data Mining"

Radhika M Pai., Ananthanarayana V.S.

14th International Conference on Advanced Computing and Communication (ADCOM 2006),
Dec 20 -23rd, 2006, Surathkal, (India), pg: 547 - 552.

http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=4289952

19. "A Simplified Graph Approach for Mining Bio Networks", Santhi Thilagam P., Ananthanarayana V.S.

International Conference on Bioinformatics and Diagetes Mellitus, March 25 - 27, 2006, Visakapatinam, (India), pg: 110 -115.

20. "Generalized Quantitative Association Rule Mining and Classification of Data Set Using an Extended Tree Approach"

Preetham Kumar, Ananthanarayana V.S.

International Conference on Intelligent Systems & Networks (IISN-2007), Feb 23 -25, 2007, Haryana, (India), pg: 359 – 364.

21. "An Efficient Approach for Mining Association Rules from Multiple Databases" Santhi Thilagam P., Ananthanarayana V.S. International Conference on Advanced Computing and Communication, Feb 9-10, 2007, SIT, Pulloor, India, pg: 636 – 641.

22. "An Efficient Study of the Effect of Frequency of Co-occurrence of Features in Clustering" Radhika M Pai, Ananthanarayana V.S 20th IEEE Proceedings of International Symposium on Signal Processing and its Applications (ISSPA), Feb 12 – 14th, 2007, Sharjah, UAE.

23. "An Efficient Classification Algorithm based on Pattern Range Tree Prototypes" Akshath Vig, Sreeranga Kamat, Ananthanarayana V.S 10th International Conference on Information Technology, Rourkela, India, 17th – 20th Dec, pg. 50-55,2007. http://ieeexplore.ieee.org/xpls/abs_all.isp?arnumber=4418267

24. "Semantic Partition Based Association Rule Mining across Multi-Databases using Abstraction"

Santhi Thilagam P, Ananthanarayana V.S

6th International Conference on Machine Learning and Applications (ICMLA) 2007, Cincinnatti, Ohio, USA, pg 81 - 86.

http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4457212

25. "An abstraction Based Communication Efficient Distributed Association Rule Mining" Santhi Thilagam P, Ananthanarayana V.S
9th International Conference on Distributed Computing and Networking (ICDCN) 2008, Jan 5
– 8, 2008, Kolkata, India, LNCS Vol. 4904, pg.251-256.
http://link.springer.com/chapter/10.1007%2F978-3-540-77444-0_23

26. "Prefix – Suffix Trees: A Novel Scheme for Compact Representation of Large Data Sets" Radhika M Pai, Ananthanarayana V.S 2nd International Conference on Pattern Recognition and Machine Intelligence (PReMI) 2007, Dec 8 – 12, 2008, ISI, Kolkatta, India, Vol.4815, pg. 316 - 323. http://link.springer.com/chapter/10.1007%2F978-3-540-77046-6 40

27. "Distributed Algorithms for Clustering Large Data Sets"
Radhika M Pai, Ananthanarayana V.S
2nd International Conference on Informatics (INFORMATICS) 2007, Nov 27 – 28, 2007, Kuala Lumpur, Malaysia.

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Pushpalatha K, Ananthanarayana V.S.

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Karthik N and Ananthanarayana V.S

4th IEEE International Conference on Signal Processing, Communications and Networking (ICSCN'17), Chennai, March 16 - 18, 2017.

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Karthik N and Ananthanarayana V.S.

The 16th IEEE International Conference On Trust, Security And Privacy In Computing And Communications (IEEE TrustCom-17) Sydney, Australia, August 1 - 4, 2017

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Karthik N and Ananthanarayana V.S.

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Rathinaraja J, Ananthanarayana V.S.

The 33rd ACM/SIGAPP Symposium On Applied Computing (SAC 2018), Pau, France, April 9 -13, 2018.

88. "Distributed Public Computing and Storage using Mobile Devices"
Prem Kumar M, Raksheet R Bhat, Sagar Alavandar and Ananthanarayana V. S
2018 IEEE International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (DISCOVER 2018), Moodabidri, 13 -14 August 2018

89. "Towards an Upper Ontology and Hybrid Ontology Matching for Pervasive Environments" Karthik N and Ananthanarayana V.S.

18th International Conference on Intelligent Systems Design and Applications (ISDA 2018) held in Vellore, India, December 6-8, 2018, Volume 2, pg: 275-283 https://link.springer.com/chapter/10.1007/978-3-030-16660-1_27 https://doi.org/10.1007/978-3-030-16660-1_27

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Karthik N and Ananthanarayana V.S.

2018 IEEE/ACIS 17th International Conference on Computer and Information Science (ICIS), 6-8 June 2018, Singapore, pg: 28 - 33.

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3rd International Conference on Internet of Things and Connected Technologies (ICIoTCT), 2018 held at Malaviya National Institute of Technology, Jaipur (India) on March 26-27, 2018. https://ssrn.com/abstract=3170199

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92. "Dynamic Performance Aware Reduce Task Scheduling in MapReduce on Virtualized Environment"

Rathinaraja J, Ananthanarayana V.S.

IEEE ACIS 16th SERA (International Conference on Software Engineering, Management, and Applicatins), June 13 - 15, 2018, Kunming, China, pg 222 - 218.

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18th International Conference on Computer and Information Science (ICIS 2019), June 17-19, 2019, Beijing, China

94. "NPRank: Nexus based Predicate Ranking of Linked Data"
Sakthi Murugan R., Ananthanarayana V.S.
5th International Conference on Data Science and Engineering (ICDSE 2019)
Indian Institute of Technology Patna (26 to 28 September 2019)

95. Medical Knowledge-based Deep Learning Framework for Disease Prediction on Unstructured Radiology Free-Text Reports under Low Data condition

Shashank Shetty, Ananthanarayana V S., Ajit Mahale

21st International Conference on Engineering Applications of Neural Networks, Porto Carras Grand Resort, Halkidiki, Greece, 5 – 7 June, 2020

DOI: 10.1007/978-3-030-48791-1 27

National Journals (4)

"General Foundation for Association Rule Mining"
 Ananthanarayana, V.S., Narasimha Murty, M., Subramanian, D.K.,
 Vivek National Journal, Vol. 14, No. 2, 2001. pg 12 – 22.

2. "Research Directions in Association Rule Mining Activity : A Database Ananthanarayana V.S.

Perspective", NITK Research Bulletin, Vol. 13, No. 2, Dec 2004, pg 17 - 23.

 "Dynamic Tree Structure for Efficient Classification", NITK Research Bulletin, Vol. No. 15, No.1, June 2006, pg 8 – 18. Ananthanarayana V.S.

4. "Identification and Handling of Conflicting Requests in UDDI Registry: A Formalism", NITK Research Bulletin, Vol. 16, No. 2, December 2007, pg 15 – 24.

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 "Association Rule Mining: A Survey from Database Perspective", Ananthanarayana, V.S., National Conference on Recent Trends in DBMS Concept and Practice, 2002. pg 85 – 104.

 "Pattern Tree Based Mining of Multi-databases for Associations", Ananthanarayana, V.S., National Conference on Distributed Computing, Nitte, March 5 – 6, 2004.

3. "Pattern Mining in Ubiquitous Environment: A Review" Santhi Thilagam, P., Soumya Hegde, Ananthanarayana, V.S., National Conference on Ubiquitous Computing, Nitte, 2006, pg 15 – 17.

4. "An Imrovement to the RPC-tree based Clustering Algorithm"
Radhika M Pai, Ananthanarayana V.S
Proceedings of the National Conference on Recent Advancements in

Information Technology (NCRAIT 2007), Sri Ramakrishna Engineering College Coimbatore, Feb 9 – 10, 2007.

 "Knowledge-base Based Character Recognition System for Filled Application Forms" Ananthanarayana V.S.
 KU-NITK Joint Seminar on Recent Advances in Engineering and Technology at Inamori Auditorium, Kagoshima University, November 27 – 28, 2008.

"Wave Collision in Fluid"
 Vikram Kushwaha, Ananthanarayana V.S., B.R. Shankar,
 Proceedings of Indian Conference on Computer Vision, Graphics, Image
 and Video Processing (ICCVGIVP 2009), Nagpur, 13th – 14th March, 2009.

ANNEXURE B

Professional Activities:

- Program chair and Member of advisory committee of national conference on Recent Trends in Database Systems - Practice and Concepts, March 2002 at NMAMITM, Nitte.
- Member of Local Inspection Committee of Visweswaraiah Technological University (VTU) Belgaum, 2002 – 2003.
- Program committee member of national conference on Data Mining (NCDM 2004), Dec 2004, Coimbotore.
- Member of BOE(PG Computer Science) of VTU, Belgaum, 2003 2004.
- Expert member of ISRO selection committee for Computer Engg, 2002 2003.
- Program committee member of national symposium on data and Knowledge engineering (NSDKE2005), July 2005, at Vallabh, Gujarat.
- Executive member of YUVA.COM, a state government programme for youth, 2002 2004.
- BOS member for Computer Sc and Engg of NMAMIT, Nitte and BOS member for IT of Manipal University, for the academic year 2007 08.
- Advisory committee member of Short term course on Distributed Computing and Software Verification (DISCOVER'07) 23 – 27th July 2007 at NITK Surathkal. And also delivered a lecture on "Distributed Coordination"
- Advisory committee member of International Conference on Open Source Computing (INCOSC-08), 12 -13th December 2008 at NMAMIT, Nitte.
- Organized a MHRD sponsored summer school on "Emerging Technologies in Data Mining and Wireless Sensor Networks" (DW-WSN – 2008) from 21st July 2008 to 25th July 2008
- B.Tech(Information Technology) discipline of Dept. of Information Technology, NITK, Surathkal is accreditated for 3 years on 2008 and for 5 years on 2014 during my headship.
- Organized short term course/ workshop on HP Networking on 3rd April 2009.
- Chairman of Technical Committee, ISTE Annual Convention, 2009 from Dec 18 20, 2009.
- BOS member of NMAMIT, Nitte for BE in CSE, MTech in CSE and MCA programme for the academic year 2009 2010.
- BOS member of MCA, MSc(Computer Science), PGDCA of Mangalore University for 3 years from January 2010.
- BOS Member in Computer Science (Postgraduate) of University of Mysore for three years from 29/09/2010.
- Publication Chair for 5th International Conference on Industrial Information System 2010 (ICIIS 2010), from July 29 – Aug 1st 2010.
- Member of Departmental Curriculum Committee of Information & Communication Technology, Manipal Institute of Technology, Manipal for the academic year 2010 – 11
- Technical Committee Member of Central Counseling Board (CCB) 2011.
- Nominated as Academic Auditor to audit BE(CSE), BE(ISE) and MCA programs of The National Institute of Engineering, Mysore during 2011.
- Member of Advisory Committee for National Conference on Recent Trends in Computational Sciences and Engineering (NCRTCS-2011) on 12th February 2011 at Sullia.
- Nominated as Academic Auditor to audit B.Tech programme in Computer Sc and Engineering and Information Sc and Engineering at National Institute of Engineering, Mysore, 2011.
- BOS Member for NMAMIT MCA programme, Mangalore University Computer Science (PG) programme, Manipal University Information and Communication Technology (UG & PG) programme during 2011-12.
- Nominated as IT Technical Expert for the evaluation of the software procurement, "Development/customization of delivery of web based ERP system for Finance and Accounting, Procurement and Material Management, Legal Section Monitoring, Tendering Monitoring and Human Resource Management System" (`650 crore estimated project) by HESCOM, Hubli.
- Nominated as member of Board of Appointment of Mangalore University, 2011 2012.

- Nominated as BOS(ISE) member of Basaveshwar Engineering College, Bagalkot by Visvesvaraya Technological University, Belgaum from 01/08/2012 to 30/07/2014.
- Programme Committee Member for 28th ACM Symposium on Applied Computing SAC 2013: Track on Cloud Computing, March 18 – 22, 2013, Coimbra, Portugal.
- Organizing Chair for 2nd International Conference on Advanced Computing, Networking and Security, 2013 which will held on 15 – 17th Dec 2013.
- Expert member for CAS faculty selection in NIT Calicut on 4th July 2013.
- Administered TEQIP-II sponsored short term course on Research Trends in Information Technology, 11-12, July 2013.
- Organized TEQIP II sponsored short term course/ workshop on Virtualization jointly with DELL R&D, Bangalore on 27th September 2013.
- Administered TEQIP II sponsored short term course/ workshop on Attacks of Different Layers of TCP/IP and Tools for Analysis, 10th – 11th October 2013.
- Organized TEQIP II sponsored guest lecture on Heterogeneous Computing (Speaker: Dr. SR Prakash, AMD) on 25th October, 2013.
- Organizing Chair for 2nd International Conference on Advanced Computing, Networking and Security (ADCONS) 2013, Dec 15 – 17, 2013.
- NITK-ICT Committee member for managing telecommunication system, 2013.
- Technical Committee member for DASA Admission 2013 -14.
- Expert member for scientist promotions (from B to C) in DRDO, Hyderabad on 6th and 7th May 2013; in DRDO, Bangalore on 25 and 26th May 2014.
- Paper setting committee member for Computer Science and Information Technology discipline of GATE 2014.
- VTU nominated BOS member for NMAMIT, Nitte for 2 years from June 2014 to June 2016 for MCA stream.
- BOS member for Gudlavalleru College of Engineering, Vijayawada, 2014.
- Faculty selection committee expert member for Manipal University, August 21, 2014.
- Organized Institute sponsored guest lecture on Mobile Computing & Research Trends (Speaker: Prof. Nabanitha Das, ISI Kolkatta) on 24th January 2014.
- Administered TEQIP II sponsored workshop on "Software Testing" jointly with DELL R&D, Bangalore on 24th February 2014.
- Facilitated the technical meeting with Prof. Raj Acharya, Head, Dept. of CSE, Penn State University, USA on 30th September 2014.
- Executive Member of PTA, K.V.No. 1., Panambur for 2014-15 and 2016-18.
- Curriculum committee member for IIIT-Dharwar, 2015.
- Adhoc faculty selection committee member for Dept. of CSE, NIT Warangal on 23rd July 2015.
- Examiner for evaluating MTech thesis of Computer Science & Engg discipline of NIT Warangal on 30th June and 1st July 2015.
- BOS IT (UG & PG) member of Goa University, Goa, 2015
- BOS in Computer & Information Science member of Srinivas University, Mangalore, 2015
- Divisional (Computer Science & Engg) Executive Member of Institute of Engineers (India) [IE(I)] Mangalore Local Chapter, 2015.
- Technical Question paper setter 2015 (Technical Knoweldge Test) for the post of Asst. Engineer of Power Grid Corporation India Limited, New Delhi.
- Convener-Registration for the 13th Convocation of NITK, Nov 14, 2015.
- Nominated as member of expert committee to perform the academic review of Dept. of Computer Science & Engg, N.I.T. Calicut on 27th November 2015.
- Administered TEQIP II sponsored workshop on "Virtualization" jointly with DELL R&D, Bangalore on 20th March 2015.
- Facilitated the technical meeting with Prof. Raghava Gowda, Dept. of Computer Science, Dayton University, USA on 14th May 2015.
- Organized the guest lecture on "Software Project Management" by Prof. Raghava Gowda, Dayton University, USA on 3rd August, 2015.

- Coordinator for the joint project between Dept. Of IT, NITK Surathkal, Dept. of Computer Science & Engg, Penn State University, USA and School of Science and Technology, Bosnia, during Aug - Dec, 2015.
 - Project title: Centre County Office Services A Cyber Learning Project
 - Students: 5 from NITK Surathkal, 5 from PSU, 5 from Bosnia.
 - Duration: 4 Months.
- Academic Council member of NMAMIT, Nitte for 2015-16 and 2016-17.
- Nominated as Departmental Curriculum Committee member of Computer Sc & Engg
 Department and Information Communication Technology Department of MIT, Manipal, 2015 –
 16.
- DAAB Committee member for CSE Department of NITK, Surathkal for 2015-16.
- Convener of Technical Committee for Centralized Counselling for M. Tech./M. Arch./ M. Plan. Admissions, 2016 (CCMT 2016)
- Faculty selection committee expert member for Manipal University, March 30, 2016.
- Advisor committee member for National Workshop on Recent Trends in Data Mining, 29 -30, January 2016, Central University Kerala, Kasargod.
- Coordinated TEQIP II sponsored one day workshop on "Technical Writing" by Dell R & D Bangalore on 11th January 2016.
- Organized Institute sponsored one day workshop on "Containers Technology" on 18th March 2016
- Member of Advisory Committee in 2016 IEEE International Conference on Distributed Computing, VLSI Electrical Circuits and Robotics (DISCOVER 2016) 13 -14, August 2016, NITK Surathkal
- Member of Academic Council, Basaveshwar Engineering College, Bagalkot 2016.
- Nodal Officer, Visvesvaraya PhD scheme, DeitY, MHRD initiative since September 2016.
- Convener-Registration for the 14th Convocation of NITK, Nov 12, 2016.
- Convener-MIS team of NITK, 2016 2019
- Organized TEQIP II sponsored one day workshop on "Intel's Student Developer Program for Artificial Intelligence" on 20th March 2017.
- Centre-in-charge for NATA 2017 examination at NITK Surathkal (Date of exam: April 16, 2017)
- Centre -in-charge/Presiding Officer for JEE(Advanced) 2017 at NITK Surathkal (Date of exam: 21 May 2017).
- Convener General Arrangement for the 14th Convocation of NITK, 28th October 2017
- Nominated as Academic Auditor to audit BE(CSE) and BE(ISE) programs of The National Institute of Engineering, Mysore during 2017.
- Chairman for the 1000 Crore proposal to "Institutions of Eminence",2018
- Member of Institute Academic Curriculum Revision committee, 2018.
- Advisory committee member for Convocation 2018.
- Organized TEQIP III sponsored one day workshop on "High Performance Computing" on 6th April 2018 [Conducted by DEL EMC].
- Member of steering committee as part of NITK-STEP-MRPL MoU to monitor startup activities, 2018
- Steering committee convener for the effective implementation of eOffice(Lite). September, 2018
- Chairman for the MTech programme sliding and spot round admission 2018.
- Board nominee for selection of Professor, Associate Professor and Assistant Professor in the department of Computer Science & Engineering and Information Technology at N.I.T. Srinagar (Aug 20, 2018).
- Chiarman for Peer Review Committee of Visvesvaraya PhD scheme to select Young Research Faculty Scholarships, 2019
- Chairman-MIS team of NITK since 2019
- Chairman of the committee constituted to facilitate proper management of the entire recruitment process in Career Development Centre, 23, Jan 2019

- Transformation Taskforce in charge for IT Transformation, 4th Jan 2019
- Member of NIRF 2019 Core committee
- Chairman of Project Oversight Committee for DHI Fame Project. [OM:3382/NITK/CSD-DHISRM/KVG/2018-19/PURCHASE, Dated 07/01/2019]
- Chairman of Institute level committee for delegation of powers to various functionaries, March, 2019.
- Advisory Committee Convener for Smart India Hackathon (SSH 2019) Software Edition Committee. [OM: NITK/SIH/Estt./2019/B1, Dated 06/02/2019]Advisory committee member for Incident 2019
- Advisory committee member for Incident 2019
- Chairman of the committee constituted for the introduction of Bio-Metric System to NITK faculty members. [OM: Estt./Bio-Metric System-Faculty/NITK/2019/B9, Dated 16/01/2019]
- Chairman for the academic committee for establishing extension centre of NITK at Bengaluru, 2019
- BOS Member for CSE disciple of IITDM, Kurnool and attended BOS-CSE on 9th November 2019
- BOG Nominated expert for the selection of faculty at CSE department of MNIT Jaipur on 4th December 2019
- Organized Industry-Institute Interaction workshop as a part of NITK Extension Centre, Bangaluru on 4th January, 2020 [Supported by TEQIP III].
- Invited as academic auditor for academic audit of PG and UG programs of CSE department of MIT Manipal on 20th and 21st of January 2020.
- Member of DASA Core Committee, for the admission of DASA students for the academic year 2020 – 21
- Invited as external expert for promotional interview at MAHE, September 14, 2020 for Dept. of CSE and Information & Communication Technology
- Doctoral Assessment Committee meeting on 21st August 2020 for Doctoral candidate Mrs.
 Shwetha Rai of MIT Manipal
- PhD Examiner for Mr. Seshu Babu Pulagara of NIT Trichy, the viva voce exam is conducted on 12th October 2020 [Thesis title: AN ENERGY-EFFICIENT AND SCALABLE GROUP-KEY AGREEMENT AND ROBUST AUTHENTICATION SCHEMESFOR MOBILE AD HOC NETWORKS]
- Resource person on "Approaching New Reality in Campus, Preparing Students for Job Relevant Education" conducted by India Didactics Association on a round table e-session on 23rd July 2020.
- Introduction to webinar for NEP 2020 series conducted by NITK (Totally 11 webinars in webinar series)
- Chairman for preparing the framework for involving industry partner for certificate programs along with Dept/Centre and CCE, 2020.
- Technical Committee convener for Convocation 2020.
- Chairman, to create a framework to enable Inhouse software development under T & C mode.2020
- Chairman, to create a framework to enable the institute to conduct certificate programs in collaboration with a strategic industry partners [7/12/2020]
- Chairman, for Centre of Excellence with Industrial partnership [13/8/2020]
- Program Incharge for NITK-CRF Inauguration 25/2/2020
- Chairman for the NITK research ethics committee [14/10/2020]
- Chairman for NIRF- with responsibility of checking HEFA funding to improve NIRF ranking [17/8/2020]
- Convener for the committee to look after Institute long term and short term action points in view of NEP 2020.[18/8/2020]

- Chairman for the committee constituted to create a framework for proper disbursal and utilization of start-up research grants [17/8/2020]
- Chairman for the committee constituted for the framework for appointment of PDF at NITK Surathkal [7/8/2020]
- Chairman for the medical insurance provisioning for the Institute students [18/6/2020]
- Chairman for the committee to review the budget for the year 2020-21 and submit a suitable plan of action to overcome the fund crisis[15/6/2020]
- BOS Member for PG and UG CSE programme of IITDM, Karnool, 2020
- DCC Member for PG and UG CSE programme of MIT Manipal (MAHE), 2020
- Chairman for amending the NITK T & C framework to include distribution of amount accruing from administrative/organizational/ institutional consultancy projects [5/2/2021]
- Chairman of the NITK research review committee [4/1/2021]
- Chairman for the committee to review the budget for the year 2021-22 and submit suitable action plan to overcome the fund crisis [3/7/2021]
- Academic auditor for UG and PG CSE programs of NIE, Mysore for the academic year 2021-22.
- BOG nominated expert member for faculty selection to IIITDM, Karnool during the selection on 6th July 2021.

Annexure C

Outreach/Professional Activities:

- Delivered invited talk on Recent trends in IT at IEEE Local chapter, Mangalore on May 17, 2004.
- 2. Delivered invited talk on Data Mining at National Conference on Recent Trends in DBMS and Practice, March 5, 2002.
- 3. Delivered inaugural lecture on Recent Trends in Association Rule Mining Activity at KVG Engineering College, Sullia, Dec 2003.
- Delivered invited talk on Statistical data mining at Dept. of Statistics, Mangalore University, Mangalore, Oct 2003.
- Delivered the full course lecture on Data-Base Management to MSc(Information Technology) students of Dept. of Computer Science, Mangalore University, Mangalore, from Feb 01 – April 2001.
- 6. Delivered special lecture on Data Mining Practice at Dept. of Information Technology, MIT, Manipal, Oct 2001.
- 7. Delivered inaugural lecture on Data Warehousing and Data Mining at Alva's College of Applied Science and Business Management, Moodbidri, Feb 2004.
- 8. Delivered lectures in the areas of Databases, Web technologies, Web mining, Web publishing at various STTPs organized at different departments of NITK, Surathkal.
- 9. Delivered lectures on "Data Mining: A Database Perspective" at QIP programme organized by Dept. of Computer Science, Mysore University, 14th March 2006.
- 10. Delivered guest lecture on "Research Directions in Data Mining" at Dept. of Computer Science and Engg., NMAMIT, Bangalore, 12th August 2006.
- 11. Given a talk on "Clock synchronization in Distributed Computing Systems" in an STTP programme on "Distributed Systems and Distributed Computing" held at Adichunchanagiri Institute of Technology, Chikmagalure on 27th March 2007.
- 12. Delivered a general lecture on "Information Technology and its Applications" to the teachers of Balmata Women Training College, Mangalore on 29th March 2008.
- 13. Delivered a technical lecture on "Data Mining: Research Directions" at Canara Engineering College, Benjana Padavu on 22nd May 2008.
- 14. Delivered a technical lecture on "Data Mining: An Overview" to MHRD sponsored summer school INFORMATION SYSTEM PROJECT MANAGEMENT on 27th June 2008, NITK Surathkal
- Delivered a technical talk on "Data Mining: A Research Report" to AICTE sponsored summer school – DATA MINING: NEXT GENERATION CHALLENGES on 2nd July 2008, NIT Warangal.
- 16. Delivered invited lecture on "Knowledge Discovery: A View on Applications and Research from Database Perspective", 30th July 2008, NMAMIT, Nitte.

- 17. Delivered an invited talk on "Data Mining: Fundamentals, Issues and Importance" on 23rd August, 2008, IBM Technology Day, NITK, Surathkal.
- 18. Delivered a technical talk on "Distributed Coordination in Loosely Coupled Environment" on 14th March 2009 at Mahatma Gandhi Memorial College, Udupi.
- 19. Delivered an invited talk on "Challenges and Applications of Data Mining" on 6th April 2009, at Srinivas Institute of Management Studies, Mangalore.
- 20. Delivered invited technical talk on "Distributed Coordination : A fundamental issue in DCS" at St. Joseph Engineering College Vamanjur on 11th September 2009.
- 21. Delivered Key note address on "Conventional Middleware Technologies" during VTU sponsored workshop on "Service Oriented Architecture" at St. Joseph Engineering College, Vamanjur on 28th January 2010.
- 22. Delivered a special invited lecture on "Data Mining Activities Relevance for Applications", at NMAMIT, Nitte on 26th August 2010.
- 23. Expert invitee for PhD Protocol on "Formulation of a framework security mechanisms in the context of Adaptive Distributed Systems", MIT Manipal on 30th August 2010.
- 24. Delivered invited talk on "Data Mining Activities from Application Point of View" and "Research Directions in Data Mining" at Goa Engineering College, Goa on 8th September 2010.
- 25. Delivered invited talk on "Requirements for Application based Data Mining Activity Selection" at Dr. M.V. Shetty Institute of Technology (MVSIT), Moodbidri on 23rd October 2010.
- 26. Delivered expert talk on "Data Mining and Applications" at MNIT Jaipur and Kishanghar campus of Central University of Rajasthan from 15th 17th December 2010.
- 27. Reviewed NPTEL video course material on "High Performance Computing" authored by Prof. Mathew Jacob of Indian Institute of Science, Bangalore, 2011.
- 28. Reviewed NPTEL video course material on "Pattern Recognition" authored by Prof. M Narasimha Murty and Dr. Susheela Devi of Indian Institute of Science, Bangalore, 2011.
- 29. Delivered expert lecture on "Conventional Middleware Technologies" under the Faculty Development Programme (FDP) on Recent Advances in Web Technology sponsored by VTU and Vision Group on Science and Technology (VGST), Govt. of Karnataka by St. Joseph Engineering College, Vamanjur, on 27th January 2011.
- 30. Participated in NMEICT South Zonal Meet (Theme: Net Connectivity) conducted by BSNL on 28th January 2011.
- 31. Delivered an invited talk on "Dynamic Data Mining" in the National Conference on Recent Trends in Computational Sciences and Engineering (NCRTCS-2011) on 12th February 2011 at Sullia.
- 32. Delivered expert lecture on "Data Mining Concepts and Research Directions" during FDP on "Advances in DBMS and Future Allied Research Avenues" at KLE Institute of Technology (KLEIT) Hubli on 26th February 2011.

- 33. Honored as Outstanding Alumni for the remarkable progress as an academician by Basaveshwar Engineering College during Silver Jubilee Celebrations of Computer Science and Engineering Department on 19 21st February 2011.
- 34. Invited as Chairperson for the Computer Science paper presentation on International Conference on Emerging Trends in Engineering (ICETE-11), 4th 5th May 2011 at NMAMIT, Nitte.
- 35. Invited as Chairperson for 1st International Conference on Computer Science, Engineering and Applications (ICCSEA 2011), May 25 27th, 2011 at Dubai.
- 36. Delivered expert lecture on "Application of Graphs in Data Mining: A Research Report" during FDP on Advances in Graph Theory and its Applications to Data Mining and Networking" at Dr. MVSIT, Moodbidri on 15th March 2012.
- 37. Delivered invited talk on "Research Directions in Dynamic Data Mining" on National Conference on Advanced Computing and Communications (NCACC'12), April 27-28, 2012 at Dept. of PG Studies in Computer Science (Decennial Celebrations 2002 2012), Kuvempu University.
- 38. Delivered a technical talk on "Identification of Data Mining Activities on Real Time Applications" at Shree Devi Institute of Technology on 16th August 2013.
- 39. Delivered a technical talk on "Data Mining Problems" on 22nd August 2013 at Alvas Institute of Technology Moodbidri.
- 40. Given expert lecture (SME) on "Distributed Computing Systems" at NPTEL workshop at Indian Academy degree collage, Bangalore on 8th November 2013.
- 41. Given invited lecture on "How To Do Research: A Student Perspective" at FDP programme organized by NITK-STEP, EDII Ahmadabad & Srinivas Group of Institutions at Srinivas Institute of Management Studies, Pandeshwar, Mangalore on 4th February 2014.
- 42. Attended a workshop on "NPTEL Online Certification Courses" at IIT Madras on 25th February 2014.
- 43. Delivered expert lecture on "Orientation on Project Work" at Alva's Institute of Engineering & Technology, Moodbidri on 11, 08, 2014.
- 44. Delivered expert lecture on "How to do research: A students' perspective" at FDP programme organized by NITK-STEP, EDII Ahmadabad at Women's Polytechnic Mangalore on 24th September 2014.
- 45. Delivered key note lecture on technical session on "Next Generation Research in Computer Technology" in UGC sponsored National Seminar on Research & Higher Education in Computer Science & Technology on 17th December 2014 at Vivekananda College Puttur.
- 46. Set the question paper for "Technical Knowledge Test Computer Applications" discipline, Asst. Engineer(IT) post for Power Grid Corporation of India Limited, August, 2015.
- 47. Conducted mock NBA accreditation of CSE and ISE discipline of NMAMIT, Nitte on 14th and 15th July, 2015.
- 48. Delivered Keynote Lecture on "Abstraction based Mining" in the National workshop on Latest Trends in Data Mining (LTDM 2016) on 29 30, January 2016 at Central University of Kerala.

- 49. Visited MIT Manipal as member of mock NBA inspection committee for CSE and IT disciplines on 6/2/2016.
- 50. Delivered an invited lecture on "Importance of Abstraction in Data Mining" in TEQIP II Sponsored Five Day National Level Seminar on "Multimedia Data Analysis" April 26th April 30th, 2016, SJCE Mysore.
- 51. Invited as expert member to review MTech(CSE) syllabus and to evaluate MTech (CSE) projects at NIT Agartala on May 11, 2016.
- 52. Delivered invited talk on "Big Data for Healthcare" organized by A.J. Institute of Hospital Management in collaboration with Academy of Hospital Administration in the CME on Basic Research & Its Importance in Hospital Administration on 17th December 2016.
- 53. Part of the elite panel of judges to evaluate the innovative products/ideas to be displayed by students & faculty of Manipal University on 19th December 2016 at the Innovation Centre, MIT, Manipal.
- 54. Delivered invited talk on "Data Mining Applicability in Green Technologies for Sustainable Development" in two days International Symposium on Green Technologies for Sustainable Development at BEC, Bagalokot on 24-25th February 2017.
- 55. Attended Academic Council meeting of NMAMIT, Nitte on 28th June 2017.
- 56. Attended Academic Council meeting of BEC, Bagalkot on 15th July 2017.
- 57. Delivered guest lecture about "Engineering Education" in the orientation program at A.J. Institute of Engineering and Technology, Mangaluru on 17/08/2017.
- 58. Delivered key note address about "Role of Information Technology for Smart City" at International Workshop on "Development of Sustainable Smart Cities: Perspectives on Engineering Challenges", MITE (DoSS-PEC :2018), 3 4 January 2018
- 59. Attended two week Leadership for Academicians Program (LEAP) a MHRD, Gol initiative from 19th November 30th November 2018 at IIT Kanpur.
- 60. Attended one week program on Building World Class Universities at Nanyang Business School, Nanyang Technological University, Singapore from 3 8, December 2018.
- 61. Invited lecture for "National Convention/ Project Exhibition on Industrial Internet of Things-v5 (IIOT-v5)" at Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal, Udupi on 24th October, 2019.
- 62. Invited for academic audit of PG and UG programs of CSE department of MIT Manipal on 20th and 21st of January 2020.
- 63. Invited as external expert for promotional interview at MAHE, September 14, 2020 for Dept. of CSE and Information & Communication Technology
- 64. Participated as BOS Member for NMAMIT MCA BOS Meeting held on 11th July 2020
- 65. Participated as external member for MIT-CSE DCC Meeting held on 4th November, 2020
- 66. Participated as resource person on "Approaching New Reality in Campus, Preparing Students for Job Relevant Education" conducted by India Didactics Association on a round table e-session on 23rd July 2020.
- 67. Participated in BOS -CSE Meeting at IIITDM, Karnool on Oct 26,2020

- 68. Participated as External member for MIT-CSE DCC Meeting held on 4th November, 2020
- 69. Invited to deliver the address during the inauguration of 43 online FDPs by AICTE Training and Learning (ATAL) Academy on June 7, 2021.
- 70. BoG Nominee expert for Associate Professor selection at IIITDM Karnool on 6th July 2021.
- 71. Participated DCC Meeting of MIT(MAHE), CSE Dept on 8/3/2021.
- 72. Participated in BoS Meeting of IIITDM, Karnool on 19/4/2021.