

## SUDHAKAR NAGALLA

Professor, CSE

Bapatla Engineering College

Bapatla-522102, India

Email: [sudhakar.nagalla@becbapatla.ac.in](mailto:sudhakar.nagalla@becbapatla.ac.in)



### EDUCATION

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Ph. D in Computer Science awarded in 2009, Acharya Nagarjuna University, Guntur for the thesis titled “Perceptual Structural Similarity for Image Quality Assessment.”

M.Tech in Computer Science with 84.8% marks from National Institute of Technology, Warangal (RECW), 1991-93.

B.Tech in Mechanical Engineering with 72.4% marks from Visvesraya National Institute of Technology (VRCE), Nagpur, 1979-84

### WORK EXPERIENCE

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I/C Principal , Bapatla Engineering College (BEC) :	June 2011 - Sept. 2011 Dec. 2012 - March 2013 July 2013 - July2014 Aug. 2015 - May 2018
Professor, Department of CSE, BEC	June 1998-
Associate Professor, Department of CSE, BEC	Aug. 1995-June 1998
Lecturer, Department of ME, BEC	Aug. 1987-Aug. 1995
Hindustan Aeronautics Limited, Bangalore	1986-87

### COURSEWORK

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Machine Learning, Theoretical Computer Science, Data Structures, Object Oriented Programming and languages, Operating Systems, Web Technologies, Networking, Computer Organization, Design and Analysis of Algorithms, Cloud Programming.

### PUBLICATIONS AND RESEARCH GUIDANCE

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#### Ph.D Thesis

Ph. D awarded for the thesis entitled “Perceptual Structural Similarity for Image Quality Assessment”( <http://hdl.handle.net/10603/127179>), submitted to Department of Computer Science, Acharya Nagarjuna University.

#### Ph.D AWARDED SCHOLARS:

Nissankara Lakshmi Prasanna for her thesis work “A Novel Algorithmic Approach for Magic Labeling of Graphs” submitted to Acharya Nagarjuna University, Guntur

N.S. Kalyan Chakravarthy for his thesis submitted “Technology Framework and Intelligent Algorithms for Storage Optimization and Scheduling for Distributed Clusters” to Acharya Nagarjuna University, Guntur

Medikonda Swapna for her thesis work “A Hybrid Model for Rainfall Prediction using both Parameterized and Time Series models in Deep Learning” submitted to Acharya Nagarjuna University, Guntur

Ravikiran Kolagani for his thesis work “Intra-Inter Domain Reusability in Multi-hop Wireless networks for Maximizing Throughput” submitted to Acharya Nagarjuna University, Guntur

#### **JOURNAL PUBLICATIONS:**

1. J. Avinash, Sudhakar Nagalla, “Interference Reduction Aware Optimal Route Path Establishment In Wireless Sensor Network Environment” in *International Journal of Engineering and Advanced Technology*, vol. 8, issue 5, June 2019, pp. 642-668.
2. J. Avinash, Sudhakar Nagalla, “Location and Quality of Service Guaranteed Optimized Routing In Wireless Sensor Network Environment” in *Journal of Advanced Research in Dynamical & Control Systems*, vol. 10, issue 11, 2018, pp. 295-306.
3. M.Swapna, Sudhakar Nagalla, “Artificial Neural Network Techniques by Using Time Series and Parameterized Rainfall Prediction Models: A Comparative Study” in *International Journal of Research in Electronics and Computer Engineering*, vol. 6, issue 2, Apr.-June 2018, pp. 1538-1545.
4. M.Swapna, Sudhakar Nagalla, “A Hybrid Model for Rainfall Prediction using Both Parametrized and Time Series Models” in *International Journal of Pure and Applied Mathematics*, vol. 119, No.14, 2018, pp. 1549-1556.
5. K Ravikiran, Sudhakar Nagalla, ”Maximizing Throughput in Multi hop Wireless Network by considering Intra and Inter flow Spatial Reusability” in *Journal of Advanced Research in Dynamical and Control Systems*, Vol. 10, No. 06-Special Issue, 2018, 708-717.
6. K Ravikiran, Sudhakar Nagalla, “A Theoretical Analysis of Routing Metrics for Maximizing Throughput in Multihop Wireless Network” in *International Journal of Innovative Research & Studies*, Volume 8, Issue III, March 2018, pp. 459-467.
7. N.S. Kalyan Chakravarthy, N. Sudhakar, E. Srinivasa Reddy, “Implementation of cost effective hierarchical Hadoop cluster - a case study for education” in *International Journal of Engineering & Technology*, Vol. 7, 2018, 210-216.
8. N.S. Kalyan Chakravarthy, N. Sudhakar, E. Srinivasa Reddy, “Multilevel Storage Optimization Using Dimension Reduction and Compression Framework (MLSO-DRC)-

- Application and Comparison for Real Time Data” in *Journal of Advanced Research in Dynamical and Control Systems*, Vol. 10, No. 05, 2018, 158-162.
9. N.S. Kalyan Chakravarthy, N. Sudhakar, E. Srinivasa Reddy, “An intelligent storage optimization technique for heterogeneous hadoop clusters” in *International Journal of Simulation: Systems, Science and Technology*, 19(4):9.1-9.6, 2018.
  10. K. Ravikiran, Dr. Sudhakar Nagalla “A Survey on Intra and Inter Domain Reusability Routing Protocols in MANETs” in *International Journal of Computer Applications*, vol. 169(5), July 2017, pp. 21-24.
  11. K. Ravikiran, Dr. Sudhakar Nagalla “A Novel Accession of Key Management for Secure Quick Transmission in Isolated Groups” in *International Journal of Emerging Technology and Advanced Engineering* vol. 7, issue 6, June 2017, pp. 245-248.
  12. K. Ravikiran, Dr. Sudhakar Nagalla “A Survey on Intra Domain Protocols and Metrics for Choosing a Best Path in Wireless Network” in *International Journal of Science Technology & Engineering*, vol. 2, issue 12, June 2016, pp. 500-504.
  13. M. Swapna and N. Sudhakar, “An Artificial Recurrent Neural Network model for Weather Forecasting”, *International Journal of Science & Engineering Development Research*, vol. 1, pp. 43-47, September, 2016.
  14. Nissankara Lakshmi Prasanna, Nagalla Sudhakar, “Algorithm For Edge Antimagic Labeling For Specific Classes Of Graphs”, *International Journal Of Experimental Algorithms*, vol.5, issue 1, 2015.
  15. Sudhakar Nagalla, Ramesh Babu Inampudi, “Perceptual Weights based on Local Energy for Image Quality Assessment”, *International Journal of Image Processing(IJIP)*, vol. 8(6), pp 468-478, Dec. 2014.
  16. N. Lakshmi Prasanna, K. Sravanthi, Nagalla Sudhakar, “Applications Of Graph Labeling In Major Areas Of Computer Science”, *International Journal Of Research In Computer And Communication Technology*, vol. 3, issue 8, August-2014 (Online) 2278-5841, (Print) 2320 - 5156
  17. Nissankara Lakshmi Prasanna, Nagalla Sudhakar “Algorithms for Magic Labeling on Graphs ”, *The Journal of Theoretical and Applied Information Technology*, vol. 66, issue. 1, pp. 36-42, August, 2014.
  18. Nissankara Lakshmi Prasanna, Nagalla Sudhakar, K. Sravanthi, “Algorithm for Vertex Anti-Magic Total Labeling On Various Classes Of Graphs”, *Contemporary Engineering Sciences*, vol. 7, 2014, No. 19, 915 - 922, [Http://Dx.Doi.Org/10.12988/Ces.2014.4665](http://Dx.Doi.Org/10.12988/Ces.2014.4665)

19. N. Lakshmi Prasanna, K. Sravanthi and Nagalla Sudhakar, "Applications Of Graph Labeling In Communication Networks", *Oriental Journal Of Computer Science & Technology*, vol. 7, No. 01, pp. 139-145, April, 2014.
20. M. Swapna and N. Sudhakar, "Comparison of Neural Network Configurations in the Prediction of Monthly Rainfall over Coastal Andhra Pradesh", *International Journal of Advanced and Innovative Research (IJAIR)*, vol. 2, pp. 285-290, January, 2013.
21. D. Venkata Rao, N. Sudhakar, B. R. Babu, L. Pratap Reddy, "An image quality assessment technique based on visual regions of interest weighted structural similarity", *ICGST international journal on Graphics Vision and Image Processing (GVIP)*, vol. 6, issue 2, pp 69-75, September 2006.

#### **CONFERENCE PUBLICATIONS:**

1. K. Ravikiran, Dr. Sudhakar Nagalla "Implementation and Performance analysis of Routing Protocols in wireless mobile Ad-Hoc Networks" in the *International Conference on Contemporary Engineering and Technology* on 31st March and 1st April- 2017.
2. Nissankara Lakshmi Prasanna, Nagalla Sudhakar, "Enhanced Algorithms for VMTL, EMTL and TML on Cycles and Wheels", *ICT and Critical Infrastructure: Proceedings of the 48th Annual Convention of Computer Society of India- Vol II*, pp. 173-180, Springer International Publishing Switzerland, 2014.
3. D. Venkata Rao, N. Sudhakar, I.R. Babu, L. Pratap Reddy., "Image quality assessment complemented with visual regions of interest", *Proc. Of ICCTA'07, IEEE Computer Society press*. pp 681-687, ISI Kolkata, March 2007.
4. D. Venkata Rao, N. Sudhakar, I.R. Babu, L. Pratp Reddy., "A reduced reference image quality assessment technique based on texture variance", *proc of IEEE international conference*, pp 708-713, ICSIP'06., Hubli, December 2006.
5. D. Venkata Rao, V.R. Rayalu, N. Sudhakar, L. Pratap Reddy., "A visual region of interest weighted image quality index", *proc of IET international conference on visual information engineering*, pp 594-599, Bangalore, September 2006.

#### **ADMINISTRATIVE EXPERIENCE**

Served as Head, Department of Computer Science and Engineering, BEC for more than Ten Years and taken up NBA Accreditation in 2003, 2007 and 2013.

Served as the Principal, BEC(Autonomous) for 5 years during June 2011 - Sept. 2011, Dec. 2012 - March 2013, July 2013 - July 2014, Aug. 2015 - May 2018. Taken up the process of Extension of

Autonomous Status in 2016. Introduced several reforms in Teaching-Learning Processes, Examinations, Evaluation and Post-Evaluation processes.

## **AWARDS**

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Microsoft Appreciation Award for supporting Windows Appathon for students 2013-14 at Bapatla Engineering College.

Designed and introduced Cloud Programming in the curriculum in the year 2013. Obtained Azure grant worth USD \$322,800 from Azure University, Microsoft in the form of Azure passes to the students and faculty to teach the course Cloud Programming with Azure for the academic year 2013-14.

## **PROFESSIONAL MEMBERSHIP**

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Life Member of Institution of Engineers (India), FIE (ID::F-114541-6)

Life Member of Indian Society for Technical Education (ISTE) (ID::LM16071)

Member of Computer Society of India (CSI) (ID::01108493)

## **SUMMER SCHOOLS, WORKSHOPS ATTENDED**

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1. Google Android Workshop, 6th Sep to 10th Sep 2016, Google & APSSDC at VVIT, Guntur
2. Faculty Connect Program, Microsoft, Delhi, 26-27th 2014.
3. Black Berry Cascade Training, BlackBerry, Hyderabad, 25-27th March 2013.
4. Microsoft Innovation Center meet, Microsoft Bangalore, 18-03-2013.
5. Workshop on Computer Architecture and High Performance Computing by ASE, Bangalore, 15-16<sup>th</sup> March 2013.
6. Train the Trainer Program, Bosch Rexroth Center of Competence in Automation Technology, Mysore, 19-03-2012 to 18-04-2012.
7. Workshop on DNA of Finishing School for Engineering Graduates conducted on NIT, Warangal, 12-07-07 to 13-07-07.
8. International conference on ICCTA conducted by ISI, Calcutta, 07-03-07 to 09-03-07.
9. Workshop on Multicore Technologies conducted by IIT, Chennai, 11-11-06.
10. Workshop on Cyber Laws conducted by NIT., Warangal, 15-04-06 to 17-04-06.
11. Workshop on Free & Open Source Software (GNU/LINUX) conducted by VNRVJIEET, Hyderabad, 16-03-2006 to 18-03-2006.

12. Member in Education delegation to Lebanon and Jordan organized by FIEO, Government of India, from 28th Nov, 2005 to 5th Dec, 2005.
13. Short Term Course On Research Trends in Formal Languages and Thoery of Automata. IIT, Chennai, 26.09.2005 to 09.10.2005,
14. Seminar on “District Knowledge Centers”, JNTU, Hyderabad, 01-10-2004
15. Seminar on Multimedia Content Generation, by SONET, Hyderabad, 30-09-2004
16. Mentor training program for M.S. (IT) conducted by IIIT, Hyderabad, 12-07-2000 to 23-07-2000.
17. Training Program on Object-Oriented Methodology by NCST, Bangalore, 26-07-200 to 30-07-2000.
18. Teachers’ Summit by NCST, Bangalore from 9-11th March, 2000.
19. Short Term Course on Computer Networks, 24-28 Nov. 1997, IIT, Kanpur.
20. Workshop on Object-Oriented Methodology conducted by P.B. Siddhartha college, Vijayawada, 22-23<sup>rd</sup> Feb., 1995.
21. STTP on Object-oriented programming by R.E.C., Warangal, 29th May to 9th June, 1995.
22. Distributed Databases by Department of Computer Science and Engineering, Satyabhama Engineering College, Madras, 16-29 May, 1994.

#### **SUMMER SCHOOLS, WORKSHOPS CONDUCTED**

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1. Faculty Development Program on Microsoft Windows Azure, 18th-19th march, 2016
2. Windows Azure Bootcamp (Bectagon 2k16), 11th-12th march, 2016
3. Community Day Event on behalf of Microsoft at Bapatla Public School., 21st Sept., 2015
4. Workshop on Azure Enabled Mobile App Development., 27th -28th July, 2015
5. Workshop on Azure Enabled Mobile App Development., 17th-18th June, 2015
6. Faculty Development Program on Cloud Computing, 28th-29th April, 2015
7. A Workshop on Windows 8 Phone development., 28th March, 2015
8. A Workshop on Windows 8 Phone development conducted as a part of BECTAGON 2k15, 19th-20th March, 2015
9. Workshop on windows 8 App development for 3/4 B.Tech, 22nd Dec., 2014
10. Workshop on windows 8 App development for 2/4 CSE, 13th Dec., 2014
11. Workshop on Microsoft Curriculum Adoption for Faculty, 30th Nov., 2014

12. Microsoft Women Hackathon - 2014, 28th -29th Nov., 2014
13. Workshop on Windows Phone App Development, 27th-29th Sep., 2013.
14. Workshop on Windows Phone App Development, 13th-15th Sep., 2013.
15. Workshop on Windows Azure 6th-7thSep., 2013.

**Sudhakar Nagalla**