Dr. V. Sumalatha

M.Tech., Ph. D.

Director, Industrial Relations & Placements
Jawaharlal Nehru Technological University Anantapur
Anantapuram – 515 002, Andhra Pradesh, India

Bio-data

Name	:	Dr. V Sumalatha	

Parents : Dr. V. Vijaya Chandra Reddy
Smt. V. Sreedevi

Official Address : Professor of ECE
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Nationality : Indian

Religion : Hindu

Educational Qualifications:

S. No.	Qualification	University/Institution	Specialization	Year of award
1.	Ph. D	JNTU Anantapur	Wireless Networks	2010
2.	M.Tech	JNTU College of Engineerig. Anantapur	Digital Systems & Computer Electronics	2001
3.	B.Tech	JNTU College of Engineerig. Anantapur	Electronics & Communication Engineering	1993

Details of Doctoral thesis:

Area	:	Mobile Adhoc Networks
Title	:	"Implementation of Architecture and Analysis of Self Securing Techniques in MANETs"
Supervisor	:	Prof. P. Chandra Sekhara Reddy, J N T U, Hyderabad
Year of award of Ph.D	:	2010

Professional Experience   :

S.No.	Institution/Organization	Position held	Duration
1	JNTUA College of Engineering, Anantapur	Professor Department of ECE	2014 - till date
2	JNTUA College of Engineering, Anantapur	Associate Professor Department of ECE	2011 - 14
3.	JNTU College of Engineering, Anantapur	Assistant Professor (Senior Scale) Department of ECE	2005 - 2011
4	JNTU College of Engineering, Anantapur	Assistant Professor Department of ECE	2000 - 05

Administrative Experience   :

S.No.	Administrative Post held	Duration
3.	Director, Industrial Relations & Placements JNTU Anantapur	2018 – till date
5.	Head, Department of ECE JNTUA College of Engineering, Anantapur	2015 – 2018
6.	Coordinator, Academic & Planning JNTU Anantapur	2012 - 2015
7.	Training and Placement Officer JNTUA College of Engineering, Anantapur	2008 – 2012

Other Responsibilities:

- ❖   MHRD – All India Survey of Higher Education (AISHE) JNTUA University Nodal Officer from 2011 to till date.
- ❖   JNTUA – Texas Instruments University Program Coordinator from 2015 – 2018.
- ❖   Chairman (UG & PG), Board of Studies, Electronic & Communcation Engineering, JNTUA College of Engineering, Anantapur from 2015 – 2018.
- ❖   Chairman (UG), Board of Studies, Electronic & Communcation Engineering, JNTU Anantapur from 2016 – till date.

Activiites as Training and Placement Officer :

Served as Training & Placement Officer of JNTUA CEA during 2008 – 12:.

- ❖ During this period, more than 800 students are successfully placed in various companies. Recoded highest placements in terms of number of offers made (410) in an academic year & also in terms of number of companies(20) visited.
- ❖ During this period, college is accredited as trusted academic partner by WIPRO Technologies & also by Cognizant Technology Solutions. Further, Cognizant has also provided scholarships to meritorious & economically backward students..
- ❖ Organized several programmes to bridge the gap between the institution & industry..

Activities as Coordinator, Academic & Planning

Served as Coordinator, Academic & Palnning, JNTUA during 2012 - 15:.

- ❖ Convener & Member of University Purchase Committee, established & streamlined purchase procedures for the University under the guidance of the Director, Academic & Planning.
- ❖ Maintaining & furnishing all statistical data for submission to the Central and State Government.
- ❖ Assisting the Director of Academic & Planning in constituting committees for FFC visits & generating deficiency reports of the colleges.
- ❖ Preparing Convocation report of the University & printing of diary.
- ❖ Issues related to Student transfers & equivalent subjects for readmitted students.
- ❖ Assisting the Director of Academic & Planning in curriculum revision, convening BoS meetings.
- ❖ Assisting the Director of Academic & Planning in conducting ratification process pertaining to affiliated colleges.
- ❖ Maintaining the University Website & DAP Portal.

Activities as Head of the Department   :

Served as Head of ECE department, JNTUACEA during 2015 - 18:.

- ❖ Deaprtment is accredited by NBA for three years from 2016-19.
- ❖ Established VLSI laboratory with high end computers, Cadence & Mentor Grahics tools.
- ❖ Improvement in the ambience of the department
- ❖ Organized several programs for the students & faculty.
- ❖ Revision of UG & PG syllabi as Chairman – BoS for autonomous institute

Activities as Director, Industrial Realtions & Placements: (2018 – till date)

- ❖ MoU with Efftronics Systems Pvt. Ltd., Vijayawada in starting new PG program, M.Tech.- Internet of Things at the University campus college.
- ❖ Provided internship & placement opportunities to the students of the university in various reputed industries.
- ❖ Tri-party MoU between JNTUA – APSSDC & CII in establishing Model Career Center (MCC) at JNTUA.
- ❖ Organized several job fairs & training programs in collaboration with Andhra Pradesh Information Technology Academy (APITA) and Confederation of Indian Industry (CII).
- ❖ Nodal Center for ensuring uploading data of All India Survey of Higher Education (AISHE) successfully by all the colleges under JNTUA.

Other Activities:

Served as Texas Instruments University Program Coordinator of JNTUA (2015-2018):

Texas Instruments Centre of Excellence (CoE) is established in three constituent Engineering colleges of the Univeristy.

The following progams are organized for faculty & students during 2015 – 2018 through CoEs:

- ❖ Three day Faculty development program on "Linear Integrated Circuits – A Systems Approach" in collaboration with Sapience Consulting – University Program Partners of Texas Instruments during 2-4, Mar 2015.
- ❖ One day Workshop on "Analog System Design using ASLK" by the faculty mentors trained earlier by Texas Instruments on 15th July 2015.
- ❖ Three day Workshop on "Embedded System Design using MSP430" in collaboration with Sapience Consulting – University Program Partners of Texas Instruments during 10-12, September 2015.
- ❖ Online Contest in association with Texas Instruments India on 17th March, 2016. Around 500 students of various colleges participated in the contest. TI Chronos

watches, Launch pads and merit certificates were given to the top 10 winners of the online contest.

❖ One day training for the students on WEBENCH & MSP430. Around 100 students of various colleges participated in the program.

❖ Two day hands on workshop on "Embedded System Design using MSP430" by the mentors trained earlier by Texas Instruments during 24-25 June 2016. Around 55 faculty members were trained.

❖ Organized weekly online contests, DrishTI in collaboration with Texas Instruments & Sapience Consulting in the year 2017. Several students have won cash prizes and awarded merit certificates in DrishTI online contests.

❖ Initiated entrepreneurship activity, ShrisTI in collaboration with Texas Instruments & Sapience Consulting in the year 2017.

❖ Three day Workshop on "Embedded System Design using TIVA" in collaboration with Sapience Consulting – University Program Partners of Texas Instruments during 19-21, April and 31 May – 2 June, 2018.

Teaching Experience: **18**+ years of teaching UG & PG Courses

Subjects Taught:

Undergraduate courses	Post graduate courses
❖ Electronic Devices and Circuits ❖ Electronic Circuit Analysis ❖ Network Analysis ❖ Switching Theory & Logic Design ❖ Linear IC Applications ❖ Data Structures ❖ Pulse & Digital Circuits ❖ Telecommunication Switching Systems & Networks ❖ Computer Networks ❖ Neural Networks & Applications	❖ Digital Data Communications ❖ Digital System Design ❖ Artificial Neural Networks ❖ OOPs through JAVA ❖ High Speed Networks ❖ Advanced Computer Networks ❖ Fuzzy Systems & Neural Networks

❖ In addition, the laboratories of UG and PG programmes in the areas of Electronics and Computers have been dealt with.

Research Projects completed as Co-ordinator:

❖ Completed AICTE project titled " Performance Analysis of Algorithms for Multi Sensor Image Fusion & Optimization of Architecture for VLSI

Implementation" under Research Promotion Scheme (RPS) for sanctioned amount of Rs.14 Lakhs in the year 2015.

Number of Research publications:

International Journals	:	28
International Conferences	:	25
National Conferences	:	08

List of publications:
International Journals:

1. M.Chennakesavulu, T.Jayachandra Prasad, V.Sumalatha, "Data encoding techniques to improve the performance of system on chip" *Journal of King Saud University, Compute and Information Science*s, DOI: 10.1016/j.iksuci.2018.12.003, 1319-1578, 2018.
2. Prathiba. B, Jayasankar.K, Sumalatha.V, "Performance Enhancement of Wireless Sensor Networks based on a Novel Data Quality Framework-An Approach", *International Journal of Research in Electronics and Computer Engineering*, vol. 6, issue 4, ISSN: 2348-2281, 2018.
3. Nemani, Subash, Jayachandra Prasad Talari, Sumalatha V, "Reversible Data Hiding Using Secure Force Algorithm" *Journal of Advanced Research in Dynamical and Control System,* vol,10, special issue, pp 238-244, ISSN 1943-023X, 2018.
4. Prathiba. B, Jayasankar.K, Sumalatha.V "Framework For Assessing Data Quality Resembles Factor In Large Scale Wireless Sensor Network", *International Journal of Engineering & Technology*, DOI:10.14419/ijet.v7i4.19280, 2018.
5. P. Sampath Kumar, K. Jaya Sankar, V. Sumalatha "Propagation Model for Synchronous High Throughput Communication in Wireless Sensor Network", *Journal of advanced Research in Dynamical and Control Systems*, vol.10, issue.4, pp :263-277, ISSN:1943-023X. Mar 2018.
6. Nemani, Subash, Jayachandra Prasad Talari, Sumalatha V,"13/9 Lifting Wavelet Transform based Reversible Data Hiding", *International Journal of Computer Applications.,* vol. 53, pp. 20-26, 0975 – 8887, 2018.
7. B. Rajasekhar, M. Kamaraju, V. Sumalatha, "Speaker Independent Emotion Recognition from Speech Signals", *ARPN Journal of Engineering and Applied Sciences* ,vol. 13, no. 9, pp: 3188-3191, ISSN: 1819-6608, May 2018.
8. M.Chennakesavulu, T.Jayachandra Prasad, V.Sumalatha, "Improved performance of error controlling codes using pass transistor logic", *Circuits Systems and Signal Processing (SCIE)*, vol. 37,issue 3, Pp: 1145-1161, 0278-081X, Mar.2018.

9. Ajitha,D, K.V.Ramanaiah,V. Sumalatha "An Enhanced High Speed Multi-Digit BCD Adder using Quantum-dot Cellular Automata », *Journal of Semiconductors*, vol. 38, no.2, pp 1-9. 1674-4926, Feb. 2017.

10. Nemani, Subash, Jayachandra Prasad Talari, Sumalatha V, " Distortionless Data Hiding for Encrypted Images: A DCT Approach", *Journal of Engineering Science and Technology Review*, vol.10, issue 5, pp. 61-67, ISSN: 1791-2377, 2017.

11. Ajitha,D, K.V.Ramanaiah, V. Sumalatha "An Optimized Hybrid Multi-Digit BCD Adder Using QCA." *International Journal of Computer Science and Information Security*, vol. 14, no. 7, pp 589-598. 1947-5500, July 2016.

12. D Sharath Babu Rao, V Sumalatha, "The Journey of Ethernet Towards 1 TBPS and Various Fields of Applications", Indian Journal of Science and Technology, vol 9, no.11, DOI: 10.17485/ijst/2016/v9i11/89293, March 2016.

13. P. Sampath Kumar, K. Jaya Sankar, V. Sumalatha " High throughput system modeling for WSN", *International Journal of Computer Networks And Security*, vol.25, issue.2, pp:1365- 1373, ISSN : 2051-6878, , July 2015.

14. P. Sampath Kumar, K.Jaya Sankar, V.Sumalatha "Network Synchronization Coding for Wireless Sensor Network Device", *International Journal of Computer Science and Network Security,* vol.14, no. 6, pp. 127-134,ISSN: 1738 -7906, June 2014.

15. G.Mamatha, M.V.Lakshmaiah, V.Sumalatha, Cyril Prasanna Raj P, "Evaluation of DWT based image Fusion with three Different Re-sampling Methods", *International Advanced Research Journal in Science, Engineering and Technology,* vol. 2, issue 2, Feb. 2015.

16. Ajitha, D, K. V. Ramanaiah, V. Sumalatha, "An Efficient Design of XOR Gate and its Applications using QCA" *i-Manager's Journal on Electronics Engineering*, 2015.

17. G.Mamatha, M.V.Lakshmaiah, V.Sumalatha, S.Varadarajan, "DWT Based Pan-Sharpening Of Low Resolution Multispectral Satellite Images", *i-Manager's Journal on Image Processing, vol 1, no.2*, June 2014.

18. P. Sampath Kumar, K.Jaya Sankar, V.Sumalatha " Controller Design For Energy Scheduling In Wireless Sensor Network Device Modeling", *International Journal of Engineering & Technology*, ISSN: 2227-524X, 2014.

19. Y. Neeraja, V. Sumalatha, "Comprehensive Survey of Medium Access Control Protocols for MANETs" *International Journal of Emerging Trends & Technology in Computer Science,* vol. 2, issue 3, pp. 211-219, ISSN 2278-6856, June 2013.

20. P. Sampath Kumar, K. Jaya Sankar, V.Sumalatha *"Design and implementation of communication protocol for WSN"*, International Journal of Technology Intelligence and Planning, ISSN :1740-2840, 2013.

21. Ajitha, D, Ramanaiah, K. V., Kumar, P. Y, &Sumalatha, V. "Design of Compact and High Speed Baugh-Wooley Multiplier by CSA using QCA", *International Journal of Engineering Research and Technology,* vol. 2, no. 11, Nov. 2013.

22. C.Ravishankar Reddy, V.Sumalatha, P.V. Gopi Kumar "Fault Detection by using Random and Deterministic test pattern techniques in a mixed mode BIST environment" *International Journal of Research and Application*, vol. 2 , issue 5 , pp. 720-726 , Oct. 2012.

23. C.Ravishankar Reddy, V.Sumalatha, Shaik zilani "Low power, Low transition random pattern generator" *International Journal of Engineering Research & Technology*, vol.1, issue 5, July 2012.

24. Dilli Ravilla, P.C.Reddy, V.Sumalatha, "An Adaptive hybrid framework for Ad- Hoc Wireless Networks" *International Journal of Recent Trends in Engineering and Technology*, vol 4 , no.3, pp. 86-91, Nov 2010.

25. G. Srinivas Rao, V.Sumalatha, "Performance Analysis of Voice quality aspects in a wireless LAN Network" *The Journal of Computing,* vol , issue 6, pp.33 – 39, Oct 2010.

26. V.Sumalatha, V.Venkateswar Reddy," Design and implementation of Self checking carry select adder" *Journal of the Technology world*, vol. 5, issue 1, pp.19-24, Mar.2010.

27. V.Sumalatha, P.C. Reddy, "A Novel Approach for mis-behaviour Detection in Adhoc Networks" *International Journal of Cryptography and Security*, vol. 2, no.1, pp.17-24, Jan. 2009.

28. V.Sumalatha, P.C.Reddy, "Integrated Energy Aware Mechanism for On-demand Routing Protocols" *International Journal of Engineering Research and Industrial Applications*, vol.1, pp. 367- 381, 2008.

International Conferences:

1. Prathiba. B, Jayasankar.K, Sumalatha.V, "A Novel Cluster Algorithm for Leveraging Data Quality in Wireless Sensor Network", *Cybernetics and Algorithms in Intelligent Systems*, Seventh Computer Science, ISSN 2194-5357 ISSN 2194-5365, 2018.

2. Nemani, Subash, Jayachandra Prasad Talari, Sumalatha , "Estimation of performance metrics for Reversible Data Hiding before encryption", *IEEE Conference on Intelligent Computing and Control Systems,* pp.1176-1181, 978-1-5386-2745-7/17, 2017.

3. B. Rajasekhar, M. Kamaraju, V. Sumalatha, "FPGA based Emotions Recognition from Speech Signals", *IEEE sponsored third International Conference on Bio-signals, Images and Instrumentation,* 16-18 Mar. 2017

4. Prathiba. B, Jayasankar.K, Sumalatha.V, "A Novel Cluster Algorithm for Leveraging Data Quality in Wireless Sensor Network", *Smart and Innovative Trends in Next Generation Computing Technologies*, Dehradun, 2017.

5. D Sharath Babu Rao, V Sumalatha, "Design of Low Noise Amplifier with Integrated Mixer for 2.4 G Hz Wireless Applications", *International Conference on Inventive Research in Emerging Technology*, 2017.

6. Prathiba. B, Jayasankar.K, Sumalatha.V, "Enhancing Data Quality in Wireless Sensor Networks-A Review", *International Conference on Automatic Control and Dynamic Optimization Techniques,* ISBN: 978-1-5090-2081-2, 2017.

7. P. Sampath Kumar, K. Jaya Sankar, V.Sumalatha, "A Power Efficient Communication Protocol for WSN ", *International Conference on Computing Methodologies & Communication,* ISBN:978-1-5090-4890-8, July 2017.

8. D Sharath Babu Rao , V Sumalatha, "The Elements of the Ethernet : Proliferation of data rates through the Bridge Layer & MAC Protocol stack" , *International Conference on Inventive Computation Technologies*, 26-27 Aug. 2016.

9. P. Sampath Kumar, K. Jaya Sankar, V.Sumalatha, "A Power Efficient Communication Protocol for WSN", *International Conference on Computing methodologies & Communication*, ISBN:978-1-5090-4890-8, July 2017.

10. P. Sampath Kumar, K. Jaya Sankar, V.Sumalatha "Optimal synchronous node design with traffic governance in WSN ", *International Conference on Communication and Signal Processing,* ISBN: 978-1-5090-0396-9, April 2016.

11. C. Ravishankar Reddy, V. Sumalatha, "Hybrid Type Test Patter Generator for Memory Testing", *International Conference on Electricals, Electronics, Signals Communication and Optimization,* DOI: 10.1109/EESCO.2015.7253652, 2015.

12. Ajitha, D., K. V. Ramanaiah, V. Sumalatha. "A Novel design of Cascading Serial bit-stream Magnitude Comparator using QCA*" International Conference on Advances in Electronics, Computers and Communications,* 2014.

13. C. Ravishankar Reddy, V. Sumalatha, "A Novel Built in Self Test Pattern Generator for Low Power Dissipation, High Fault Coverage and Reduced Area Overhead", *International Conference on Recent Advances published in the proceedings of Design, Development and Operation of Micro Air Vehicles*, Hyderabad 21 – 23 Nov. 2013.

14. G.Mamatha, M.V.Lakshmaiah, V.Sumalatha, " Field Programmable Gate Array and Design Implementation of Image Fusion using DWT", IEEE International Conference, USA, May 2013.

15. "Field Programmable Gate Array and Design Implementation of Image Fusion using DWT", IEEE International Conference USA, May 2013.

16. Ajitha, D, K. V.Ramanaiah, V. Sumalatha. "Design of High Speed, Low Area, Carry Flow BCD Adder in QCA" *IEEE International Conference on Advanced Research in Engineering and Technology*, Feb 2013.

17. C. Ravishankar Reddy, V. Sumalatha, "A New Built in Self Test Pattern Generator for Low Power Dissipation and High Fault Coverage", *IEEE International Conference on*

Recent Advances in Intelligent Computational Systems, DOI: http://dx.doi.org/10.1109/RAICS.2013.6745440 , 2013.

18. V.Saritha, V.Sumalatha, "Robust *Fault Tolerance Approach for Multi-node Faults in Radial Basis Function Networks" International Conference on On-demand Computing*, Bangalore, 3-4 Nov. 2010.

19. V.Sumalatha, T. Syam Kumar, "Synchronization Enhancement to Network Processor using IEEE 1588 Protocol" *Second International Conference on RF and Signal Processing Systems*, Guntur during 7- 9 Jan. 2010.

20. V.Sumalatha, V.V. Reddy, "Self Checking Carry Adder Design" AICTE Sponsored *International Conference on Innovative Computing, Information and Communication Technology,* Chennai, 16 - 18 Dec. 2009.

21. V.Sumalatha , M.Hema, " Transmission & Enhancement of Image through OFC using DIP Techniques" International Conference on Coalescence of Computer Science & Biotechnology, Visakhapatnam, 16 - 17 Feb. 2009.

22. V.Sumalatha, Ms.Sandhya Rani, "Link Quality based Adaptive Routing for Ad-Hoc Network" *International Conference on Quantitative Methods, Operations & Information Technology*, IBS Hyderabad, 24-25 Oct. 2008.

23. G. Narendra Kumar, V.Sumalatha, " Secure Mulyipath Routing for fully distributed MANETs", *IETE Conference on RF & Wireless, ICON RFW-08*, IETE Bangalore centre, 24-26 April 2008.

24. V.Sumalatha, P.C.Reddy, "Coping with mis-behaviour of nodes in Mobile Ad-hoc Networks" *International Conference, INDICON'07*, IEEE Bangalore section, 6-8 Sept. 2007.

25. V.Sumalatha, P.C. Reddy, "Secure Routing in Mobile Adhoc Networks" *International Conference on Advances in Electronics and Communications*" 1-3, Feb. 2007.

26. V.Sumalatha, P.C.Reddy, "Mobile Ad-hoc Network Security and Authentication" *International Conference on Advanced Communication Systems*" Coimbatore, 10 – 12 Jan. 2007.

National Conferences:

1. V.Sumalatha, B.V.R.V.Prasad, Sudha Vani, "Image Segmentation by Fuzzy Means" *National Conference on Recent Trends in Electronics & Communication(NCRTEC'09)*, Bangalore, 04th April 2009.

2. V.Sumalatha, R.Sandhya, "Implementation of WISPER protocol for wireless multimedia networks" *National Conference on Computing and Communications (NCCC'08)*, Hyderabad, 28 – 29 November 2008.

3. V.Sumalatha, P.C.Reddy. K.Sudarsen Raju, "Performance Comparison of Routing Protocols for Mobile Ad-hoc Networks "*National Conference on Emerging Trends in*

Computer and Network Technologies (NCETCN'08), Hospet, Karnataka,19 - 20 September 2008.

4. V.Sumalatha, P.C. Reddy, "Secure Routing for fully Distributed Mobile Ad-Hoc Networks" *4th National Conference on Signals*, Anna University, Chennai , 8 - 9 May 2008.

5. V.Sumalatha, K.Chaitanya, "A Hybrid Adaptive Routing Protocol for Ad-Hoc Wireless Networks" *National Conference on Challenges and Opportunities in Information Technology*, Mandi Gobindgarh, 29th March 2008.

6. V.Sumalatha, M.Sreenivas, "A Distributed Architecture for Mobile Ad-Hoc Networks" *National Conference on Emerging Trends in Computer Science & Engineering*, Tirupathi 12 - 13 March 2008.

7. V.Sumalatha,V.Sudheer Reddy, "Securing transmission channel between two remote computers using secure shell" *ISTE sponsored National Conference on Research opportunities and Challenges in IT* (NCRC'07), Chennai, 04th April 2007.

8. V.Sumalatha, V.Vijaya Kumar, "Convoy Monitoring System" *National Conference on Advanced Technologies in Electrical & Electronics Intelligence* (ATEEI'06), Coimbatore 6 - 7 October 2006.

Membership – Professional Societies:

1. Life Member, Indian Society for Technical Education,\
2. Fellow, IEI
3. Member – IEEE

Foreign Visits:

❖ Visited Bangkok, Thailand to attend Training & Placement Officers meet "Defining Dialogues" organized by Cognizant Technology Solutions in 2010.

❖ Visited London, United Kingdom for presenting technical paper in the IEEE Technically Co-sponsored International Conference in 2015.

Declaration:

I hereby declare that the information furnished above is true to the best of knowledge

Dr. V. Sumalatha

Date: 01-01-2019
Anantapur