SHADAN COLLEGE OF ENGINEERING & TECHNOLOGY
Established by SHADAN EDUCATIONAL SOCIETY.
Approved by A.I.C.T.E and Affiliated to JNTUH, Hyderabad.
Website: www.scet.in E-Mail: scet_shadan@yahoo.co.uk
ESTD 1995

Date: 06/09/2021

Criteria-3.3.3

Number of Books and Chapters in Edited Volumes/Books Published and Papers Published in National/International Conference Proceedings by ECE dept teachers during the last five Years.

Sr. No.	Academic Year	Number of Paper Published
1	2019-2020	23
2	2018-2019	16
3	2017-2018	28
4	2016-2017	02
5	2015-2016	03

Shadan College of Engineering & Technology College Code: 08 Hyderabad-86, T.S. Peeran Cheru

PRINCIPAL
Shadan College of Engineering & Technology
Peeran Cheru, Hyderabad-86, T.S.
College Code: 08

3.3.3 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years by ECE Department

Sl. No.	Name of the teacher	Title of the book/chapters published	Title of the paper	Title of the proceedings of the conference	Name of the conference	National / International	Year of publication	ISBN/ISSN number of the proceeding	Affiliating Institute at the time of publication	Name of the publisher	Links
2019-2020											
1	M. Riyaz	IRJGES	DESIGN & IMPLEMENTATION OF WIRELESS SENSOR	International Conference on Transformational Excellence in Engineering, Science and Management	IRJGES	International	2019-2020	2456-172X	shadan college of engineering & rechnology	IRJGES	https://www.sciencedirect.com/science/article/abs/pii/S0924424715302259
2	M. A. Sameer	IRJGES	TRUST MANAGEMENT SCHEME FOR CLUSTERED WIRELESS SENSOR	International Conference on Transformational Excellence in Engineering, Science and Management	IRJGES	International	2019-2020	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
3	Azeem Hussain	I R J G E S	TRUST MANAGEMENT SCHEME FOR CLUSTERED WIRELESS SENSOR	International Conference on Transformational Excellence in Engineering, Science and Management	IRJGES	International	2019-2020	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/

Shadan College of Engineering & Technology College Code: 08 Hyderabad T.S. Peerancheru

PRINCIPAL Shadan College of Engineering & Technology Peerancheru, Hyderabad-500 086. College Code: 08

4	Azeem Hussain	I R J G E S	DESIGN & IMPLEMENTATION OF CONVOLUTION NEURALNETWORKS	International Conference on Transformational Excellence in Engineering, Science and Management	IRJGES	International	2019-2020	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
5	Aaqib Ihraz	I R J G E S	DESIGN & IMPLEMENTATION OF CONVOLUTION NEURALNETWORKS	International Conference on Transformational Excellence in Engineering, Science and Management	IRJGES	International	2019-2020	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
6	M. Iliyas	I R J G E S	DESIGN & IMPLEMENTATION OF WIRELESS SENSOR NETWORKS	International Conference on Transformational Excellence in Engineering, Science and Management	IRJGES	International	2019-2020	2456-172X	shadan college of engineering & rechnology	IRJGES	https://www.sciencedirect.com/science/article/abs/pii/S0924424715302259
7	A. K. Lodhi	I R J G E S	DESIGN & IMPLEMENTATION OF WIRELESS SENSOR NETWORKS	International Conference on Transformational Excellence in Engineering, Science and Management	IRJGES	International	2019-2020	2456-172X	shadan college of engineering & rechnology	IRJGES	https://www.sciencedirect.com/science/article/abs/pii/S0924424715302259
8	M A Sameer	I R J G E S	DESIGN & IMPLEMENTATION OF CONVOLUTION NEURALNETWORKS	International Conference on Transformational Excellence in Engineering, Science and Management	IRJGES	International	2019-2020	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
9	H. A. Abdus Samad	I R J G E S	TRUST MANAGEMENT SCHEME FOR CLUSTERED WIRELESS SENSOR NETWORKS	International Conference on Transformational Excellence in Engineering, Science and Management	IRJGES	International	2019-2020	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/

10	M. Iliyas	I R J G E S	DESIGN & IMPLEMENTATION OF CONVOLUTION NEURALNETWORKS	International Conference on Transformational Excellence in Engineering, Science and Management	IRJGES	International	2019-2020	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
11	M. A. Sameer	I R J G E S	DESIGN & IMPLEMENTATION OF WIRELESS SENSOR NETWORKS	International Conference on Transformational Excellence in Engineering, Science and Management	IRJGES	International	2019-2020	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
12	Mr. Abdul Mubeen Mohammed	I R J G E S	A RESUME EVALUATION SYSTEM BASED ON TEXT MINING	International Conference on Transformational Excellence in Engineering, Science and Management	IRJGES	International	2019-2020	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
13	Mr. Abdul Mubeen Mohammed	I R J G E S	ACHIEVING EFFECTIVE CLOUD STORAGE SERVICES: MULTIKEYWORD RANKED SEARCHOVER ENCRYPTED CLOUD DATA SUPPORTING	International Conference on Transformational Excellence in Engineering, Science and Management	IRJGES	International	2019-2020	2456-172X	shadan college of engineering & rechnology	IRJGES	https://www.searchencrypt.com/search?eq=EVUM5iLIV1EUgjt5h%2F5KSLIspf7k5095HOvzr0qBQkNKWw2QmkTwIzP9hcEFM9kXm5kluwzP0a98BHFawR4G3FSqsArW0OtiIxeyTAePgp%2Fuv%2FRu5kZadUVMa0bc4lPzLY%2F%2FtwJeMLJrb7c4jZYiXayrvwzwbEDZ7cZwzEAybPs%3D
14	Dr. Mohammad Iliyas	Concept of VLSI Design	DESIGN & IMPLEMENTATION OF CONVOLUTION NEURALNETWORKS	International Conference on Transformational Excellence in Engineering, Science and Management	Concept of VLSI Design	National	2020	ISBN No: 978-81-945468-5-6	Shadan College of Engineering and Technology	DK International Research Foundation	https://www.searchencrypt.com/search/?st=web&eq=IGqV5teRIstSsY6JSIKaQkDoqJDnhpYr3tmotMqnlyFVkDjB%2BUA2BRBkR8K%2B27Ph

15	Syed Azeem Hussain	An energy clock boosting based super regenerative receiver for WBANs	scientific committee of the International Conference on Advances in Materials Research MATPR19918	6th International Conference on Materials Processing and Characterization	Elsevier Materials Today: Proceedings Volume5, 2018	International	2020	1SBN: 978-93-87433-29-8.	Shadan College of Engineering and Technology	Elsevier Materials Today: Proceedings	https://www.sciencedirect.com/science/article/pii/S2214785320388817
16	P. Jubair Ahamed	An energy clock boosting based super regenerative receiver for WBANs	scientific committee of the International Conference on Advances in Materials Research MATPR19918	6th International Conference on Materials Processing and Characterization	Elsevier Materials Today: Proceedings Volume5, 2018	International	2020	1SBN: 978-93-87433-29-8.	Shadan College of Engineering and Technology	Elsevier Materials Today: Proceedings	https://www.sciencedirect.com/science/article/pii/S2214785320388817
17	Mohammed Abdul Haseeb	Implementation of digital IIR filter design based on field programmable 4 gate array	scientific committee of the International Conference on Advances in Materials Research MATPR19919	International Conference on Materials Processing and Characterization	Elsevier Materials Today: Proceedings Volume5, 2018	International	2020	1SBN: 978-93-87433-29-8.	Shadan College of Engineering and Technology	Elsevier Materials Today: Proceedings	http://www.jcreview.com/?mno=122797
18	P. Jubair Ahamed	Implementation of digital IIR filter design based on field programmable 5 gate array	scientific committee of the International Conference on Advances in Materials Research MATPR19920	International Conference on Materials Processing and Characterization	Elsevier Materials Today: Proceedings Volume5, 2018	International	2020	1SBN: 978-93-87433-29-8.	Shadan College of Engineering and Technology	Elsevier Materials Today: Proceedings	http://www.jcreview.com/?mno=122797

19	Mr. Amairullah Khan Lodhi	Low Pass – IIR Filter Design on Posit Numbers Format using Verilog	Elsevier Editorial System(tm) for Materials	6th International Conference on Materials Processing and Characterization	Elsevier Materials Today: Proceedings Volume5, 2018	International	2020	1SBN: 978-93-87433-29-8.	Shadan College of Engineering and Technology	Elsevier Materials Today: Proceedings	http://www.jcreview.com/?mno=122797
20	Dr. Mohammed Ilyas	Low Pass – IIR Filter Design on Posit Numbers Format using Verilog	Elsevier Editorial System(tm) for Materials	6th International Conference on Materials Processing and Characterization	Elsevier Materials Today: Proceedings Volume5, 2018	International	2020	1SBN: 978-93-87433-29-8.	Shadan College of Engineering and Technology	Elsevier Materials Today: Proceedings	http://www.jcreview.com/?mno=122797
21	Mr. Amairullah Khan Lodhi	Performance Improvement In Wireless Sensor Networks By Removing The Packet Drop From The Node Buffer	Elsevier Editorial System(tm) for Materials	6th International Conference on Materials Processing and Characterization	Elsevier Materials Today: Proceedings Volume5, 2018	International	2020	1SBN: 978-93-87433-29-8.	Shadan College of Engineering and Technology	Elsevier Materials Today: Proceedings	https://www.sciencedirect.com/science/article/pii/S2214785320312384
22	Amairullah Khan Lodhi, M. S. S. Rukmini, Syed Abdulsattar	ICMPC	Performance Improvement in Wireless Sensor Networks by Removing the Packet Drop from the Node Buffer	ICMPC	ICMPC-2020 (GLA University)	International	2020	ISSN 0985-6767	Shadan College of Engineering and Technology	ICMPC	https://www.sciencedirect.com/science/article/pii/S2214785320312384

23	Amairullah Khan Lodhi, M. S. S. Rukmini, Syed Abdulsattar	iCASIC	Lifetime Enhancement Based on Energy and Buffer Residual Status of Intermediate Node in Wireless Sensor Networks	iCASIC	Accepted iCASIC-2020 (VIT, Vellore)		2020	ISSN 0975-6876	Shadan College of Engineering and Technology	iCASIC	https://www.researchgate.net/publication/349816264_Lifetime_Enhancement_Based_on_Energy_and_Buffer_Residual_Status_of_Intermediate_Node_in_Wireless_Sensor_Networks

2018-2019

1	M A Sameer	I R J G E S	DESIGN & IMPLEMENTATION OF CONVOLUTION NEURAL NETWORKS	INTERNATIONAL CONFERENCE ON RECENT ISSUES IN ENGINEERING SCIENCES AND MANAGEMENT	International Reasearch in Global Engineering and Sciences	International	2018-2019	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
2	M. Iliyas	I R J G E S	DESIGN & IMPLEMENTATION OF CONVOLUTION NEURAL NETWORKS	INTERNATIONAL CONFERENCE ON RECENT ISSUES IN ENGINEERING SCIENCES AND MANAGEMENT	International Reasearch in Global Engineering and Sciences	International	2018-2019	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
3	H. A. Abdus Samad,	I R J G E S	TRUST MANAGEMENT SCHEME FOR CLUSTERED WIRELESS SENSOR NETWORKS	INTERNATIONAL CONFERENCE ON RECENT ISSUES IN ENGINEERING SCIENCES AND MANAGEMENT	International Reasearch in Global Engineering and Sciences	International	2018-2019	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/

Shadan College of Engineering & Technology College Code 08 Hyderabad, T.S. Peeran Cheru

Shadan College of Engineering & Technology Peeran Cheru, Hyderabad, T.S. College Code: 08

4	Amairullah Khan Lodhi,	IRJGES	RESOURCE ORGANIZATION OF COGNITIVE RADIO NETWORKS VIA FUZZY LOGIC TECHNIQUE	INTERNATIONAL CONFERENCE ON RECENT ISSUES IN ENGINEERING SCIENCES AND MANAGEMENT	International Reasearch in Global Engineering and Sciences	International	2018-2019	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
5	Mohammed Riyaz	IRJGES	DESIGN & IMPLEMENTATION OF MEMORY ARCHITECTURES IN QUANTUM DOT CELLULAR AUTOMATA TECHNOLOGY	INTERNATIONAL CONFERENCE ON RECENT ISSUES IN ENGINEERING SCIENCES AND MANAGEMENT	International Reasearch in Global Engineering and Sciences	International	2018-2019	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
6	Azeem Hussain,	IRJGES	DESIGN & IMPLEMENTATION OF CONVOLUTION NEURAL NETWORKS	INTERNATIONAL CONFERENCE ON RECENT ISSUES IN ENGINEERING SCIENCES AND MANAGEMENT	International Reasearch in Global Engineering and Sciences	International	2018-2019	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
7	Mohammed Riyaz,	IRJGES	RESOURCE ORGANIZATION OF COGNITIVE RADIO NETWORKS VIA FUZZY LOGIC TECHNIQUE	INTERNATIONAL CONFERENCE ON RECENT ISSUES IN ENGINEERING SCIENCES AND MANAGEMENT	International Reasearch in Global Engineering and Sciences	International	2018-2019	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/

8	Md Mukram Ali,	IRJGES	DESIGN & IMPLEMENTATION OF MEMORY ARCHITECTURES IN QUANTUM DOT CELLULAR AUTOMATA TECHNOLOGY	INTERNATIONAL CONFERENCE ON RECENT ISSUES IN ENGINEERING SCIENCES AND MANAGEMENT	International Reasearch in Global Engineering and Sciences	International	2018-2019	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
9	Aaqib Ihraz	IRJGES	DESIGN & IMPLEMENTATION OF CONVOLUTION NEURAL NETWORKS	INTERNATIONAL CONFERENCE ON RECENT ISSUES IN ENGINEERING SCIENCES AND MANAGEMENT	International Reasearch in Global Engineering and Sciences	International	2018-2019	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
10	A. HaseebM. A. Sameer	IRJGES	TRUST MANAGEMENT SCHEME FOR CLUSTERED WIRELESS SENSOR NETWORKS	INTERNATIONAL CONFERENCE ON RECENT ISSUES IN ENGINEERING SCIENCES AND MANAGEMENT	International Reasearch in Global Engineering and Sciences	International	2018-2019	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
11	Syeda Sameena Shireen	IRJGES	RESOURCE ORGANIZATION OF COGNITIVE RADIO NETWORKS VIA FUZZY LOGIC TECHNIQUE	INTERNATIONAL CONFERENCE ON RECENT ISSUES IN ENGINEERING SCIENCES AND MANAGEMENT	International Reasearch in Global Engineering and Sciences	International	2018-2019	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/

PRINCIPAL

12	Shaikh Ayaz Pasha	I R J G E S	DESIGN & IMPLEMENTATION OF MEMORY ARCHITECTURES IN QUANTUM DOT CELLULAR AUTOMATA TECHNOLOGY	INTERNATIONAL CONFERENCE ON RECENT ISSUES IN ENGINEERING SCIENCES AND MANAGEMENT	International Reasearch in Global Engineering and Sciences	International	2018-2019	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
13	M. A. Sameer	I R J G E S	TRUST MANAGEMENT SCHEME FOR CLUSTERED WIRELESS SENSOR NETWORKS	INTERNATIONAL CONFERENCE ON RECENT ISSUES IN ENGINEERING SCIENCES AND MANAGEMENT	International Reasearch in Global Engineering and Sciences	International	2018-2019	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
14	Shaikh Ayaz Pasha4	I R J G E S	RESOURCE ORGANIZATION OF COGNITIVE RADIO NETWORKS VIA FUZZY LOGIC TECHNIQUE	INTERNATIONAL CONFERENCE ON RECENT ISSUES IN ENGINEERING SCIENCES AND MANAGEMENT	International Reasearch in Global Engineering and Sciences	International	2018-2019	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/
15	Amairullah Khan Lodhi	I R J G E S	DESIGN & IMPLEMENTATION OF MEMORY ARCHITECTURES IN QUANTUM DOT CELLULAR AUTOMATA TECHNOLOGY	INTERNATIONAL CONFERENCE ON RECENT ISSUES IN ENGINEERING SCIENCES AND MANAGEMENT	International Reasearch in Global Engineering and Sciences	International	2018-2019	2456-172X	shadan college of engineering & rechnology	IRJGES	http://www.irjges.com/

16	Amairullah Khan Lodhi,	[Lecture Notes in Electrical Engineering 511] Nanoelectronics, Circuits and Communication Systems (2019, Springer Singapore) SCI	Energy-Efficient Routing Protocol for Node Lifetime Enhancement in Wireless Sensor Networks	[Lecture Notes in Electrical Engineering 511] Vijay Nath, Jyotsna Kumar Mandal - Nanoelectronics, Circuits and Communication Systems (2019, Springer Singapore) SCI	Nanoelectronics, Circuits and Communication Systems (2019, Springer Singapore) SCI	Iinternational	2018	978-981-13-0775-1 / 1876-1100	Shadan College of Engineering and Technology	IEEE, Springer Singapore	https://www.researchgate.net/publication/334160716_Energy-Efficient_Routing_Protocol_for_Network_Life_Enhancement_in_Wireless_Sensor_Networks
2017-18											
1	Aaqib Ihraz	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGN & IMPLEMENTATION ON GAS LEAK DETECTION & LOCATION SYSTEM BASED ON WIRELESS SENSOR NETWORK	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/

2	Mohammed Riyaz	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGN & IMPLEMENTATION OF MEMORY ARCHITECTURES IN QUANTUM DOT CELLULAR AUTOMATA TECHNOLOGY	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
3	Shaikh Ayaz Pasha	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGNING OF WIRELESS COMMUNICATION NETWORK FOR INTELLIGENT VEHICLE MONITORING SYSTEM	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
4	Amairullah Khan Lodhi	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGN & IMPLEMENTATION ON GAS LEAK DETECTION & LOCATION SYSTEM BASED ON WIRELESS SENSOR NETWORK	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/

Shadan College of Engineering & Technology College Code 08 Hyderabad-86, T.S. Peeran Cheru

Shadan College of Engineering & Technology Peeran Cheru, Hyderabad-86, T.S. College Code: 08

5	Md Mukram Ali	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGN & IMPLEMENTATION OF MEMORY ARCHITECTURES IN QUANTUM DOT CELLULAR AUTOMATA TECHNOLOGY	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
6	Mohammed Riyaz	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGNING OF WIRELESS COMMUNICATION NETWORK FOR INTELLIGENT VEHICLE MONITORING SYSTEM	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
7	M. A. Sameer	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	MOVING OBJECT TRACKING SYTEM FOR WIRELESS SENSOR NETWORKS	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/

Shadan College of Engineering & Technology, College Code: 03, Hyderabad, T.S., Peeran Cheru

PRINCIPAL
Shadan College of Engineering & Technology
Peeran Cheru, Hyderabad-86, T.S.
College Code: 03

8	M. Riyaz	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGN & IMPLEMENTATION OF WIRELESS SENSOR NETWORKS	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
9	Amairullah Khan Lodhi	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	HYBRID ORDER STATISTICS FILTER FOR SAR IMAGE SPECKLE NOISE	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
10	Mukram Ali	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGN & IMPLEMENTATION OF CONNECTIONLESS NETWORK SERVICE PROTOCOLS FOR MOBILE AD HOC NETWORKS	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/

11	Mohammed Riyaz	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGN & IMPLEMENTATION ON GAS LEAK DETECTION & LOCATION SYSTEM BASED ON WIRELESS SENSOR NETWORK	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
12	Shaikh Ayaz Pasha	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGN & IMPLEMENTATION OF MEMORY ARCHITECTURES IN QUANTUM DOT CELLULAR AUTOMATA TECHNOLOGY	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
13	Azeem Hussain	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGNING OF WIRELESS COMMUNICATION NETWORK FOR INTELLIGENT VEHICLE MONITORING SYSTEM	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/

14	H. A. Abdus Samad	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	MOVING OBJECT TRACKING SYTEM FOR WIRELESS SENSOR NETWORKS	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
15	M. Iliyas	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGN & IMPLEMENTATION OF WIRELESS SENSOR NETWORKS	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
16	Amairullah Khan Lodhi	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGN & IMPLEMENTATION OF MEMORY ARCHITECTURES IN QUANTUM DOT CELLULAR AUTOMATA TECHNOLOGY	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/

17	Amairullah Khan Lodhi	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGNING OF WIRELESS COMMUNICATION NETWORK FOR INTELLIGENT VEHICLE MONITORING SYSTEM	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
18	Mukram Ali	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	MOVING OBJECT TRACKING SYTEM FOR WIRELESS SENSOR NETWORKS	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
19	M. A. Sameer	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	HYBRID ORDER STATISTICS FILTER FOR SAR IMAGE SPECKLE NOISE	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/

PRINCIPAL
Shadan College of Engineering & Technology
Peeran Cheru, Hyderabad-86, T.S.
College Code: 08

20	A. Haseeb	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGN & IMPLEMENTATION OF CONNECTIONLESS NETWORK SERVICE PROTOCOLS FOR MOBILE AD HOC	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
21	M. A. Sameer	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGN & IMPLEMENTATION OF WIRELESS SENSOR NETWORKS	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
22	A. Haseeb	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	MOVING OBJECT TRACKING SYTEM FOR WIRELESS SENSOR NETWORKS	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/

College Code: 03

23	Mohammed Riyaz	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	HYBRID ORDER STATISTICS FILTER FOR SAR IMAGE SPECKLE NOISE	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
24	H. A. Abdus Samad	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGN & IMPLEMENTATION OF CONNECTIONLESS NETWORK SERVICE PROTOCOLS FOR MOBILE AD HOC NETWORKS	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
25	Mr. Abdul Mubeen Mohammed	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	FORECASTING BITCOIN PRICES USING DEEP NEURAL NETWORKS	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
26	A. K. Lodhi	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGN & IMPLEMENTATION OF WIRELESS SENSOR NETWORKS	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/

27	H. A. Abdus Samad	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	HYBRID ORDER STATISTICS FILTER FOR SAR IMAGE SPECKLE NOISE	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	INTERNATIONAL JOURNALS OF RESEARCH IN MECHANICAL MECHATRONICS AND	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/
28	M. A. Sameer	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	DESIGN & IMPLEMENTATION OF CONNECTIONLESS NETWORK SERVICE PROTOCOLS FOR MOBILE AD HOC	INTERNATIONAL CONFERENCESON CONTEMPORARY ISSUES IN ENGINEERING AND MANAGEMENT	International Research in Mechanical Mechatronics and Automobile Engineering	Iinternational	2017-2018	2454-1435	Shadan College of Engineering and Technology	IJRMMAE	http://ijrmmae.in/

2016-17

1	Shaik Saidulu	IEEE WiSPNET 2017 conference	Smart Embedded System to Building Strong Physical Embedded Barrier for Security Related Issues of IoT	IEEE WiSPNET 2017 conference	IEEE WiSPNET 2017 conference	international	2017	ISBN: 978-1-5090-4441-2	SCET	IEEE	https://www.searchencrypt.com/search?eq=g1JyzxMyaUHxqqTiO6pCb5Rvjj89sE6pE1VimiLPv23AxDbvSxfoDJ%2F2mkD3fAZ6I9wbuLHB47oFDvtupAo9KHUZJ4QETmCpBeYKj3Z%2FDtu%2FJWatiqOope%2BuQdr3t0Q0zl4Bso36jv9Mp6LRezB3VA%3D%3D

2	**Shaik Saidulu**	**Proceedings** of 4th **International Conference** on **Innovations** in **Electronics** & **Communication Engineering** (ICIECE-2015)	Design of Low Power and High Speed Modified Carry Select Adder for 16 bit Vedic Multiplier	Proceedings of 4th International Conference on Innovations in Electronics & Communication Engineering (ICIECE-2015)	Proceedings of 4th International Conference on Innovations in Electronics & Communication Engineering (ICIECE-2015)	international	42217	ISBN : 978-93-85100-41-3	GNI, HYD	(ICIECE-2015) GNI, HYD	https://www.semanticscholar.org/paper/Design-of-low-power-and-high-speed-modified-carry-Prasad-Chokkakula/ba06bf29f2ea558f8999491c840e3a7c7bbd5ddd
3	Shaik Saidulu	Proceedings of 4th International Conference on Innovations in Electronics & Communication Engineering (ICIECE-2015)	An Electronic Voting System for Haptic Touch Screen Interface	Proceedings of 4th International Conference on Innovations in Electronics & Communication Engineering (ICIECE-2015)	Proceedings of 4th International Conference on Innovations in Electronics & Communication Engineering (ICIECE-2015)	international	42218	ISBN : 978-93-85100-41-3	GNI, HYD	(ICIECE-2015) GNI, HYD	http://ijeee.in/wp-content/uploads/2015/08/IJEEE-1-3.pdf

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PRINCIPAL
Shadan College of Engineering & Technology, Peeran Cheru, Hyderabad, College Code: 08

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Performance improvement in wireless sensor networks by removing the packet drop from the node buffer

Amairullah Khan Lodhi [a], M.S.S Rukmini [a], Syed Abdulsattar [b], Shaikh Zeba Tabassum [c]

https://doi.org/10.1016/j.matpr.2020.02.483

Abstract

In Wireless Sensor Networks (WSNs) typed applications, the node buffer plays a vital role to store the processed data before transmitting it further to the base node through neighbor nodule. Nowadays, in Multi-Application Wireless Sensor Networks (MAWSNs) scenario, to improve network performance of the node buffer has to be maintained or efficiently balanced. Because, for implementing various applications, at the same time in MAWSNs, the processing, transmitting capability of the node should be enhanced and the node storage capacity (Buffer) should be maintained. Since, if the node buffer exhausted then automatically it drops the data packet and the data will be lost and hence performance degradation will occur in the network. It will also affect the network lifetime. Hence, this paper implements a mechanism to enhance the node buffer for improving network performance. The work is implemented on Network Simulator i.e., NS2 version 2.34/2.35. Our work outperforms in comparison with the existing work and improves network performance.

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Cluster Head Selection by optimized ability to restrict packet drop in Wireless Sensor Networks

Amairullah Khan Lodhi, research scholar, VFSTRU ,Gunture, lak_resumes@yahoo.co.in

Syed Abdul sattar, Principle NSAKCET ENGG & TECH, HYD ,syedabdulsattar1965@gmail.com

Abstract : Wireless sensor networks (WSNs) are comprised of spatially distributed autonomous nodes attached to the sensors to detect and maintain physical and environmental states. Energy efficiency is an important challenge in Wireless sensor networks, in which the batteries are equipped with these sensors with limited amount of power and act as a power source, which having limited storage capacities. Thus, energy efficient routing techniques are required incorporate operations of Wireless sensor networks to provide the network connectivity and routing of data with less energy consumption. Clustering in WSNs is greatest widespread mechanism in routing processes. Existing energy efficient clustering algorithms selects the cluster head based on energy status. However these protocol causes the cluster head to become bottleneck and drop the packets due to insufficient buffer. Thus in this work we propose a novel efficient metric to select the cluster head known as "optimized ability to restrict packet drop" to enhance the network life time. This metric provide the status of nodes with respect to energy and memory. Calculation of residual status of an intermediate node is done by knapsack algorithm. Performance of proposed work is analyzed by NS2 and the results shows that our work outperforms in comparison with existing protocols.

Key words: Energy efficiency, cluster head wireless sensor network, routing.

1. Introduction

Wireless Sensor Networks are emerging as a powerful requirement in Wireless technology [1]. These sensor networks expected to acquire thousands of nodes with sufficient sensing capabilities and limited communicating and computational energy allowing utilizing a sensor networkin large scale. WSNs consist of smaller elements to monitor natural and physical states like temperature, humidity,pressure, motion, pollutants, etc. Such networks can be deployed widely in various environments for civil, commercial and military applications such as vehicle tracking, medical, surveillance, acoustic data gathering, climate and habitat monitoring. Power, Processing and Storage are the key drawbacks of WSN Technology. Due to these limitations and specific sensor node architecture, there is an increasing necessity in secure and energy efficient communication protocols. An advanced technology like MEMS combined with low cost, low power DSPs and RF devices accelerates its viability of these inexpensive sensor networks. These sensors are comprised of radio transceivers, actual sensors, microcontrollers and power supply. The sensing circuits collectively compute the ambient states associated with the environment surrounding the sensor and alter them into an electrical signal. Managing such a signal exhibits some properties about objects located and/or events happening in the sensor area. A sensor collects such data and transmits either directly or through a gateway towards a central node usually via radio transmitter.

Energy Efficient Wireless Sensor Networks: A Survey on Energy Based Routing Techniques

Mo. Amanullah Khan Lodhi

Abstract:
Efficient energy utilization is critically important for maintaining a network and expanding the networks lifetime (NL) in Wireless Sensor Networks (WSN). WSN's vast sensing quality effects in several appealing areas eg. IoT, that is the reason it needs more adequate approaches for increasing NL, proper handling and forwarding of data, and minimizing the consumption of energy. The distributed nature of WSN's provides accessibility of small-scale detector nodes that has the capability to feel the information statistics as well as various environmental and physical states. In this regards for WSN's efficient energy routing techniques plays very important role for prolong the path in the network structure.
This paper, deals with detail information about various energy efficient routing techniques in WSN's for different related protocols. Furthermore, about the mechanisms that helps in achieving the energy efficiency in WSN technology.
Key Terms: - IoT, Cluster, Wireless Sensor Networks, Cluster Head, Network Lifetime, Energy Efficient, Energy aware, Reliable, routing techniques.

Section1. Introduction

WSN technology can be named as the greatest valuable technology which has wireless sensor nodes in large numbers with some special constraints, such as less-cost, minimum-power, highly sensitive, wirelessly communicating and can compute the data processed as mentioned in [1,2]. From the last few decades, it received broad attention in academia as well as industry. Furthermore, these nodes communicate over short distance to fulfill the given task what it may be industrial process control [3], IoT, 5G etc. Idea used in WSN's is that, the total potential of complete network is sufficient for given assignment, due to restrictions in potential for each single sensor node. Power consumed by each sensor node is directly proportional to the whole networks lifetime so that for maximizing the network lifetime the node should consume less power.
As we know that, these nodes are totally dependent on battery supply and the expectations are they should run up to a long period. But for several applications which are directly or indirectly related to human beings it is extremely inconvenient or we can say not possible to recharge or change charging cells for the particular sensor node. These types of networks acquire thousands of nodes with sufficient sensing capabilities. In some previous protocols like Flooding, etc. each node broadcast its control packet and data packets that it has received from other nearest nodes, and until and unless the destination reach repeating of this process is done several times. Network protocol design should be scalable to different sized networks. Due to which the general problems like, Overlap and Implosion [2] occurs. Due to small or tiny size of the node we can easily minimize the required power for getting energy efficiency and it automatically reduces the value of sensor nodes. In network protocol designing when density and topology changes, sensor node should be adaptive to such changes immediately. As we know the WSN is comprised of several nodes, by reducing each node cost we can easily reduce the whole network cost.
In WSN delivery of data packets over any channels, like noisy, error-prone, etc should be reliable and furthermore for maintaining connectivity in structure, the nodes should posses the capability of reconfiguration and organization themselves. Sensors should efficiently posse's different talent like, self-recovering, self- testing, self-calibrating, and it should be self-repairing. Sensor network should keep the data information packets from malicious assaults, for that purpose the sensor networks, should examine the QoS needs for the particular applications. Many researchers raise the issue of energy efficiency in WSN's by designing different routing protocols to elaborate the lifetime of WSN's. This survey deals with different routing techniques by considering several parameters of the sensor nodes like mobility, heterogeneity, hierarchical nature, location, data-centric, Qos based and multipath techniques. Also this survey deals with limitations of these above talked routing techniques and shows some analysis of well known energy efficient routing protocols in the table form. Furthermore, it gives some routing methodologies for achieving energy efficiency in different routing techniques. Survey shows that the Hierarchical routing technology schemes are more energy efficient as compare to location based routing techniques.
In this survey we will discuss various energy efficient as well as non-energy based routing protocols in WSN's. 2nd Section will talk about the Energy efficient routing techniques in WSN's, 3rd Section will describe non-energy based routing techniques in WSN's, 4th Section will discuss key elements of energy conservation in WSN's, 5th Section will talk about new trends of WSN's and finally 6th Section will give conclusion of our survey and future scopes in WSN's.

Section2 Energy routing techniques in WSN:

The beauty of the WSN's is the routing protocols what we are developing are individually dependent on the particular independent application. Hence different routing protocols were developed for wireless sensor networks. Anyhow while we are discussing about wireless sensor networks, these networks are differs from conventional

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RESOURCE ORGANIZATION OF COGNITIVE RADIO NETWORKS VIA FUZZY LOGIC TECHNIQUE

[1]Amairullah Khan Lodhi, [2]Mohammed Riyaz, [3]Syeda Sameena Shireen, [4]Shaikh Ayaz Pasha4
[1] Associate Professor, [2,3,4]Assist. Professor
[1,2,3,4]Shadan College of Engineering & Technology, Hyderabad
lakresumes@gmail.com

Abstract: The spectrum is a scarce resource and must utilize efficiently, the cognitive radio is a prospective solution for underutilized spectrum. Introduction of flexibility and intelligence in the wireless devices and applications have introduced the concept of Cognitive Radio. This objective has inspired various research activities on going which included the decision making aspects. In this work, a decision making process in cognitive radio is analyzed using fuzzy logic system, in which Dynamic Resource Management of Cognitive Radio Networks is effectively done. The fuzzy logic tool is very helpful for complex or uncertain process where it is difficult to develop mathematical model. Cognitive radio (CR) is a promising technology to solve the challenging spectrum allocation problem. So that, we have selected three descriptive factors for choosing the aggregation weight in dynamic resource management such as Nodes control, Nodes Link state amount and Nodes Link state time. The efficiency of the decision making process in cognitive radios is analyzed. Based on linguistic knowledge 5 rules are set up. The output of the fuzzy logic system gives the probability of the decision based on the three descriptive factors. Recognizing that fuzzy logic inference can better handle uncertainty, fuzziness, and incomplete information in node convergence report, Fuzzy Convergence is developed as a novel approach to aggregate wireless node control with affordable message overload. We show how fuzzy logic system can be used for decision making operation in cognitive radio

I. INTRODUCTION

Spectrum scarcity is one of the biggest challenges that the modern world is facing. The efficient use of available licensed spectrum is becoming more and more critical with increasing demand and usage of the radio spectrum. Different researches show that the usage is not uniform throughout the licensed spectrum rather it is heavy in certain parts of the spectrum and has portions that are utilized inefficiently.

Some researchers even claim that more than 70% of the licensed frequency band is not in use, most of the time. So, there is much room for work yet in the unutilized parts or the inefficiently utilized parts of the spectrum, to overcome the spectrum scarcity problem.

Different researches are in progress and ways are being found to efficiently utilize the available licensed spectrum. One of the ways is the use of Cognitive Radio, according to this; the already licensed spectrum can be used more efficiently by introducing artificial intelligence, the decision making to be specific, in the radio. This enables the radio to learn from its environment, considering certain parameters. Based on this knowledge the radio can actively exploit the possible empty frequencies in the licensed band of the spectrum that can then be assigned to other processes in such a way that they dont cause any interference to the frequency band that is already in use.

This makes the efficient usage of the available licensed spectrum possible. The users that are allocated the licensed frequency bands of the spectrum are the primary users and the users that are allocated the empty frequencies within the licensed frequency band, according to their requested QoS specifications, are known as the secondary users or the cognitive users. They are called as the secondary users as they utilize the unused spectrum resources only, on non-interfering basis, with the primary users.

This paper will focus on the implementation of different spectrum allocation techniques for these secondary users, based on Fuzzy logic Algorithms and an evaluation of the performance of these techniques using Matlab coding. This work will focus on the decision-making process mainly, with an assumption that the radio environment has already been sensed and the QoS requirements for the application have been specified either by the sensed radio environment or by the secondary user itself [4].

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TRUST MANAGEMENT SCHEME FOR CLUSTERED WIRELESS SENSOR NETWORKS

[1]H. A. Abdus Samad, [2]Ayaz Shaikh, [3]A. Haseeb,[4] M. A. Sameer
[1,2,3,4]Asst. Prof, Dept of ECE
[1,2,3,4]Shadan College of Engineering & Technology, Hyderabad

Abstract— In this work, we propose a new lightweight Group- based Trust Management Scheme (GTMS) for wireless sensor networks, which employs clustering. Our approach reduces the cost of trust evaluation. Also, theoretical as well as simulation results show that our scheme demands less memory, energy, and communication overheads as compared to the current state-of-the-art trust management schemes and it is more suitable for large-scale sensor networks. Traditional trust management schemes developed for wired and wireless ad hoc networks are not well suited for sensor networks due to their higher consumption of resources such as memory and power. Furthermore, GTMS also enables us to detect and prevent malicious, selfish, and faulty nodes.
Index Terms—Trust evaluation, trust modeling, trust management, security, sensor networks.

1 INTRODUCTION

RUST in general is the level of confidence in a person or a thing. Various engineering models such as security, usability, reliability, availability, safety, and privacy models incorporate some limited aspects of trust with different meanings [1]. For example, in sensor network security, trust is a level of assurance about a key's authenticity that would be provided by some centralized trusted body to the sensor node (SN) [2], [3]. In wireless ad hoc and sensor network reliability, trust is used as a measure of node's competence in providing required service [4], [5], [6], [7]. In general, establishing trust in a network gives many benefits such as the following:

1. Trust solves the problem of providing correspond- ing access control based on judging the quality of SNs and their services. This problem cannot be solved through traditional security mechanisms [8].
2. Trust solves the problem of providing reliable routing paths that do not contain any malicious, selfish, or faulty node(s) [9], [10].
3. Trust makes the traditional security services more robust and reliable by ensuring that all the communicating nodes are trusted during authentication, authorization, or key management [11].

For Wireless Sensor Networks (WSNs), we visualize that trust management is a cooperative business rather than an individual task due to the use of clustering schemes such as LEACH [12], PEGASIS [13], TEEN [14], and HEED [15] in

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E-mail: {riaz, hassan, dauriol, sylee}@oslab.khu.ac.kr, yjsong@khu.ac.kr.
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real-world scenarios. Moreover, SNs can also be deployed in the form of groups [16], which are willing to collaborate with each other in order to process, aggregate, and forward collected data [17]. This highlights the fact that these clustering schemes and group deployments enable SNs to fulfill their responsibilities in a cooperative manner rather than individually. Therefore, establishing and managing trust in a cooperative manner in clustering environment provides many advantages. Such as, within the cluster, it helps in the selection of trusted cluster head by the member nodes. Similarly, the cluster head will be able to detect faulty or malicious node(s). In case of multihop clustering [15], [18], it helps to select trusted en route nodes through which a node can send data to the cluster

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TRUST MANAGEMENT SCHEME FOR CLUSTERED WIRELESS SENSOR NETWORKS

[1] H. A. Abdus Samad, [2] Ayaz Shaikh, [3] A. Haseeb, [4] M. A. Sameer
[1,2,3] Asst. Prof, Dept of ECE
[4,5,6] Shadan College of Engineering & Technology, Hyderabad

Abstract— In this work, we propose a new lightweight Group- based Trust Management Scheme (GTMS) for wireless sensor networks, which employs clustering. Our approach reduces the cost of trust evaluation. Also, theoretical as well as simulation results show that our scheme demands less memory, energy, and communication overheads as compared to the current state-of-the-art trust management schemes and it is more suitable for large-scale sensor networks. Traditional trust management schemes developed for wired and wireless ad hoc networks are not well suited for sensor networks due to their higher consumption of resources such as memory and power. Furthermore, GTMS also enables us to detect and prevent malicious, selfish, and faulty nodes.

Index Terms—Trust evaluation, trust modeling, trust management, security, sensor networks.

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DESIGN & IMPLEMENTATION OF MEMORY ARCHITECTURES IN QUANTUM DOT CELLULAR AUTOMATA TECHNOLOGY

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[1]lakresumes@gmail.com, [2]mohammedmukram786@gmail.com
[1,2,3] Assist. Professor, [4]Associate Professor
[1,2,3,4] Shadan College of Engineering & Technology, Hyderabad.

Abstract: The QCA technology is used for designing and implementation of digital circuits efficiently due to its features like smaller feature size, high speed, low power dissipation and high switching frequency. These characteristics prompt memory cell architecture and implementation in QCA as an appealing choice for manufacturing storage devices. CMOS technology is experiencing power dissipation, short channel effects and quantum effects problems with its relation to chip size, which makes it too hard for integrating more transistors, reaching its scaling limits. Quantum Dot Cellular Automata (QCA) is one of emerging nanotechnologies in recent times to overcome this flaw. This paper discusses architectures of several line and loop based memory cells to compare in terms of density, low power, complexity and switching frequency and to deduce an architecture method which is significant for designing memory cells.

Keywords: Quantum Dot Cellular Automata, memory cell, architecture, density, complexity, low power

I.INTRODUCTION

In CMOS computing components are becoming smaller in size based on the Moore's law. This has caused CMOS based computing devices to experience several limitations (Misra et al., 2014). Some of important CMOS limitations are high power consumption, interconnection effects, short channel effects, fabrication difficulties and its high cost as a result of CMOS devices, high performance capability and device density which is making difficulties for CMOS technology advancement (Bhoi et al., 2021).

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The QCA technology features are very suitable for implantation of memory cells, while designing QCA memory cell architecture, important issue to consider is switching frequency and feedback paths so that so that arrangement of clocking zones are accurate in order for correct operation by means of pipelining (Frost et al., 2002).

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The paper organization is as follows. Section II briefly discusses fundamentals of QCA technology such as QCA cells, clocking schemes of QCA, and basic QCA gates and memory in motion. Section III discusses existing line and loop based memory cell architectures.

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DESIGNING OF WIRELESS COMMUNICATION NETWORK FOR INTELLIGENT VEHICLE MONITORING SYSTEM

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[1]Professor, [2,3,4]Assist. Professor
lakresumes@gmail.com
[1,2,3,4] Shadan College of Engineering & Technology, Hyderabad.

Abstract: - To meet the requirements of an intelligent vehicle monitoring system, this architecture integrates Global Position System (GPS), Global System for Mobile communications (GSM) and a Microcontroller in the whole. This device is used to prevent texting and calling of mobile phones while driving vehicles. If the driver is using the phone while the vehicle is in motion, it triggers a signal which notifies the cops with the vehicle's number plate and the location with the help of GPS system. It receives the mobile signal and detects the presence of mobile. In this paper the use of mobile phones while driving is one of the most dangerous and widely seen causes of fatal road accidents. The objective of the paper is to develop a device to find people who use mobile phones while driving and evade from stringent laws enforced by the government easily. This novel and ingenious technique facilitates the government to take adequate action against those who are violating these laws. This signal eventually triggers the microcontroller with a glowing LED. Due to the voltage fluctuation, the message is sent to the cops using GSM communication.

Keywords: Wireless/Mobile Communication; Mobile bug; Speed sensors; Vehicle Monitoring; GSM Modem; GPS based vehicle tracking system; Call Notification.

I.INTRODUCTION

An Accident is a disaster which is specific, identifiable, unexpected, unusual and unintended external event which occurs in a particular
time and place, without apparent or deliberate cause but with marked effects. It implies generally negative probabilistic outcome which may have been avoided or prevented had circumstances leading up to the accident been recognized, and acted upon, prior to its occurrence. The first one hour is the golden hour and that can make all the difference.
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DESIGN & IMPLEMENTATION OF WIRELESS SENSOR NETWORKS

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sameerk87@gmail.com , lakrenumo@gmail.com
[1,2,3,4] Shadan college of Engg. and Technology,
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Abstract— Sensing any change in the physical environment and delivering this real time information about the system to the remote station for analysis has created many applications. With the research and development in the science and technology new wired and wireless technologies for sensing have been developed with time. This paper presents an information these technologies used for wired and wireless sensor networks. For wireless sensor network some features of zigbee, enOcean, wavenis, Z-wave, wifi and Bluetooth are discussed in this paper. Brief discussion of different applications of the sensor networks is also presented.

Keywords—applications; technologies; wired sensor network; wireless sensor network.

1 INTRODUCTION

Sensor network is a group of nodes which gathers data according to their specialty. The node contains the power source, microprocessor, external memory, sensors, analog to digital converter and transceivers. Microprocessors in the nodes perform the necessary operation on data prior to send it to the remote station. Microprocessor has limited internal memory. So the external memory is also provided in the node to store the sensing data. Sensors are the physical devices which collects the environmental data as the analog signal. Then this data is converted into the digital with the help of analog to digital converter present in the node. Transceiver is the device in the node which receives the control signal from the sender and sends the operator data from the sensors to the remote station.

Power source provide the energy (electricity) to the node for its operation. This power source as a battery for the wireless sensor nodes or through cable connection for the wired sensor or the power can be generated with the some energy harvesting modes like solar cell etc. Sensor networks further can be divided into two types:

1.Wired sensor network

In the wired sensor networks power source is wired. The power is continuously supplied to the node. Moreover the data from /to transceiver is send/received using wired

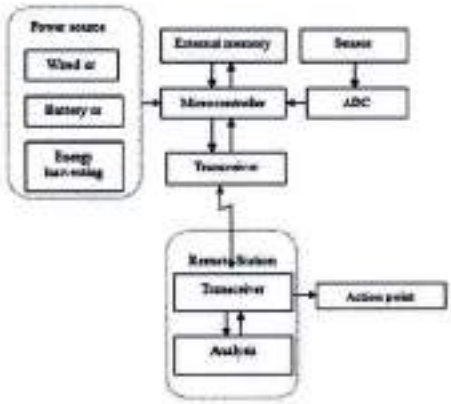

Fig. 1 Block Diagram of wireless Sensor Node

communication channel. These sensor networks are highly reliable and their applications are limited. Moreover they have mesh network of the wires connecting to the network which makes them complex to handle and increase their cost.

2.Wireless sensor networks

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DESIGN & IMPLEMENTATION OF WIRELESS SENSOR NETWORKS

[1]M. A. Sameer, [2]A. K. Lodhi, [3]M. Ilyas, [4]M. Riyaz
[2,3] Professor, [1,4] Assist Professor
sameerk87@gmail.com , lakreunes@gmail.com
[1,2,3,4] Shadan college of Engg. and Technology,
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Abstract— Sensing any change in the physical environment and delivering this real time information about the system to the remote station for analysis has created many applications. With the research and development in the science and technology new wired and wireless technologies for sensing have been developed with time. This paper presents an information these technologies used for wired and wireless sensor networks. For wireless sensor network some features of zigbee, enOcean, wavenis, Z-wave, wifi and Bluetooth are discussed in this paper. Brief discussion of different applications of the sensor networks is also presented.

Keywords—applications; technologies; wired sensor network; wireless sensor network.

1 INTRODUCTION

Sensor network is a group of nodes which gathers data according to their specialty. The node contains the power source, microprocessor, external memory, sensors, analog to digital converter and transceivers. Microprocessors in the nodes perform the necessary operation on data prior to send it to the remote station. Microprocessor has limited internal memory. So the external memory is also provided in the node to store the sensing data. Sensors are the physical devices which collects the environmental data as the analog signal. Then this data is converted into the digital with the help of analog to digital converter present in the node. Transceiver is the device in the node which receives the control signal from the sender and sends the operator data from the sensors to the remote station.

Power source provide the energy (electricity) to the node for its operation. This power source as a battery for the wireless sensor nodes or through cable connection for the wired sensor or the power can be generated with the some energy harvesting modes like solar cell etc. Sensor networks farther can be divided into two types:

1.Wired sensor network

In the wired sensor networks power source is wired. The power is continuously supplied to the node. Moreover the data from /to transceiver is send/received using wired communication channel. These sensor networks are highly reliable and their applications are limited. Moreover they have mesh network of the wires connecting to the network which makes them complex to handle and increase their cost.

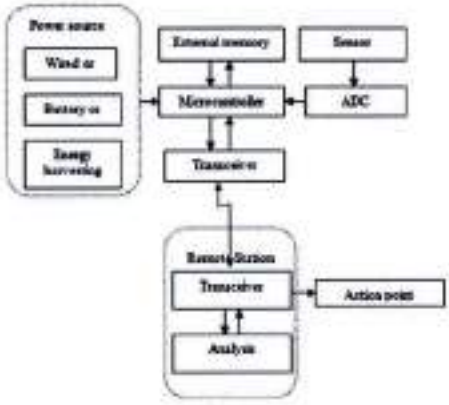

Fig. 1 Block Diagram of wireless Sensor Node

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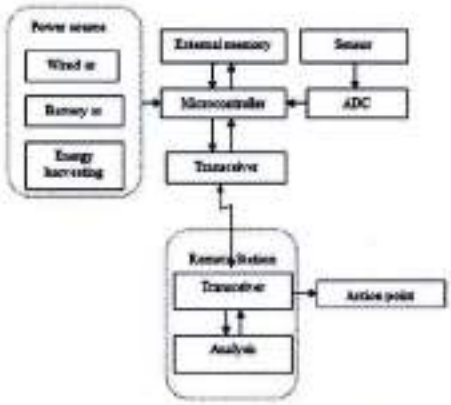

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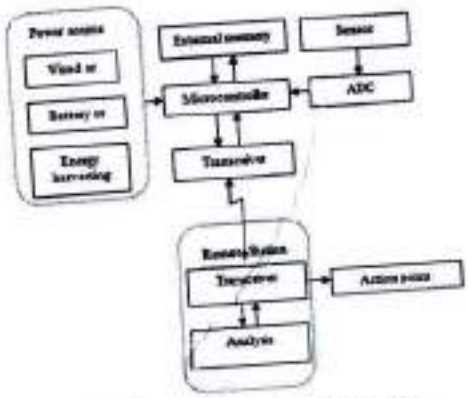

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DESIGN & IMPLEMENTATION OF CONNECTIONLESS NETWORK SERVICE PROTOCOLS FOR MOBILE AD HOC NETWORKS

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Abstract: The stipulation of connectionless network service (CLNS) is much more demanding in mobile ad hoc networks. A lot of researches have been done so as to provide CLNS by designing various MANET protocols. However, efficient performance evaluations and relative analysis of these protocols in a common pragmatic environment have been performed only in a limited manner. A Mobile Ad Hoc Network (MANET) is a network that changes locations and configure itself on the fly. It means MANETs are used where the infrastructure is not available such as military or police exercises, disaster relief operations and urgent business meetings. In this survey the relative features, functions and reliability of each CLNS protocols are studied and discussed.

Keywords: CLNS, MANETS, Reliability

1. INTRODUCTION:

Recent advancements such as Bluetooth introduceda new type of wireless systems known as mobile ad hoc networks. Mobile ad hoc networks or "short live" networks operate in the absence of fixed infrastructure. They offer quick and easy network deployment in situations where it is not possible otherwise. Ad hoc is a Latin word, which means "for this or for this only" Mobile ad hoc network is an autonomous system of mobile nodes connected by wireless links each node operates as an end system and a router for all other nodes in the network.

Ad Hoc networks can provide communication for online applications, such as message exchanges among business meeting, medical and security personnel involved in rescue missions. These applications rely only on connectionless services because of no infrastructure available. Connectionless network service provides network layer services to the transport layer. When support is provided for CLNS, routing uses routing protocols to exchange routing information. CLNS does not perform connection setup or termination because paths are determined independently for each packet that is transmitted through a network. In addition, CLNS provides best effort delivery, which means that no guarantee exists that data will not be lost, corrupted, disordered, or duplicated.

CLNS relies on transport layer protocols toperform error detection and correction.

Following this, we recap the operation, key features & functions and major protocols in selecting a connectionless network service. We focus on journal articles and peer-reviewed conferences, thereby hopefully extracting the mostuseful and important rift of the candidate solutions.

(I) Issues need to be considered while providing CLNS:

Connectionless network service refers to communication between two network end points in which messages can be sent from one end point to another without prior arrangement.

CLNS are:

- Stateless having no previously definedprotocol
- Easily accessible.

But the CLNS is not ensured that the recipient is available to receive the data. The Data has to be resent several times. It's hard to filter malicious packets using firewalls. No acknowledgement willbe given during the data transfer.The main advantage of using CLNS is that it is mainly used in "real time" applications where data sending is more important.

CLNS is a type of network service at the layer 3 of the OSI model. The service does not have the reliability of the connection-oriented method, but it is useful for periodic burst transfers. Neither system must maintain state information for the systems that they send transmission to or receive transmission from. LANs operate as connectionless systems. A computer attached to a network can start transmitting frames as soon as it has access to the network. It does not need to set up a connectionwith the destination system ahead of time.

However, a transport-level protocol such as TCP may set up a connection-oriented session when necessary. In contrast this with Connectionless service, which does

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Recent advancements such as Bluetooth introduceda new type of wireless systems known as mobile ad hoc networks. Mobile ad hoc networks or "short live" networks operate in the absence of fixed infrastructure. They offer quick and easy network deployment in situations where it is not possible otherwise. Ad hoc is a Latin word, which means "for this or for this only" Mobile ad hoc network is an autonomous system of mobile nodes connected by wireless links; each node operates as an end system and a router for all other nodes in the network.

Ad Hoc networks can provide communication forcivilian applications, such as message exchanges among business meeting, medical and security personnel involved in rescue missions. These applications rely only on connectionless services because of no infrastructure available. Connectionless network service provides network layer services to the transport layer. When support is provided for CLNS, routing uses routing protocols to exchange routing information. CLNS does not perform connection setup or termination because paths are determined independently for each packet that is transmitted through a network. In addition, CLNS provides best effort delivery, which means that no guarantee exists that data will not be lost, corrupted, disordered, or duplicated.

CLNS relies on transport layer protocols toperform error detection and correction.

Following this, we recap the operation, key features & functions and major protocols in selecting a connectionless network service. We focus on journal articles and peer-reviewed conferences, thereby hopefully extracting the mostuseful and important nift of the candidate solutions.

(I) Issues need to be considered while providing CLNS:

Connectionless network service refers to communication between two network end points inwhich messages can be sent from one end point to another without prior arrangement.

CLNS are:

- Stateless having nopreviously definedprotocol
- Easily accessible

But the CLNS is not ensured that the recipient is available to receive the data. The Data has to be resent several times. It's hard to filter malicious packets using firewalls. No acknowledgement willbe given during the data transfer. The main advantage of using CLNS is that it is mainly used in "real time" applications where data sending is more important.

CLNS is a type of network service at the layer 3 of the OSI model. This service does not have the reliability of the connection-oriented method, but it is useful for periodic burst transfers. Neither system must maintain state information for the systems that they send transmission to or receive transmission from. LANs operate as connectionless systems. A computer attached to a network can start transmitting frames as soon as it has access to the network. It does not need to set up a connectionwith the destination system ahead of time.

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DESIGN & IMPLEMENTATION OF CONNECTIONLESS NETWORK SERVICE PROTOCOLS FOR MOBILE AD HOC NETWORKS

[1]H. A. Abdus Samad, [2]M. A. Sameer , [3]A. Haseeb, [4]Mukram Ali
[1,2] Asst. Prof, Dept of ECE
[3,4,5] Shadan College of Engineering & Technology, Hyderabad.

Abstract: The stipulation of connectionless network service (CLNS) is much more demanding in mobile ad hoc networks. A lot of researches have been done so as to provide CLNS by designing various MANET protocols. However, efficient performance evaluations and relative analysis of these protocols in a common pragmatic environment have been performed only in a limited manner. A Mobile Ad Hoc Network (MANET) is a network that changes locations and configure itself on the fly. It means MANETs are used where the infrastructure is not available such as military or police exercises, disaster relief operations and urgent business meetings. In this survey the relative features, functions and reliability of each CLNS protocols are studied and discussed.

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Abstract- Full end-to-end text recognition in natural images is a challenging problem that has received much atten- tion recently. Traditional systems in this area have re- lied on elaborate models incorporating carefully hand-engineered features or large amounts of prior knowl- edge. In this paper, we take another method and combine the representative power of large, multilayer neural networks together with recent developments in unsupervised feature learning, which allows us to use a common framework to train highly-accurate text detec- tor and character recognizer modules. Then, using only simple off-the-shelf methods, we integrate these two modules into a full end-to-end, lexicon-driven, scene text recognition system that achieves state-of-the-art performance on standard benchmarks, and popular streets

1 INTRODUCTION

Extracting textual information from natural images is a challenging problem with many practical applica- tions. Unlike character recognition for scanned docu- ments, recognizing text in unconstrained images is com- plicated by a wide range of variations in backgrounds, textures, fonts, and lighting conditions. As a result, many text detection and recognition systems rely on cleverly hand-engineered features [5, 4, 14] to repre- sent the underlying data. Sophisticated models such as conditional random fields [11, 19] or pictorial structures [18] are also often required to combine the raw detec- tion/recognition outputs into a complete system.

In this paper, we attack the problem from a differ- ent angle. For low-level data representation, we use an unsupervised feature learning algorithm that can auto- matically extract features from the given data. Such algorithms have enjoyed numerous successes in many

Figure 1. CNN used for text detection.

related fields such as visual recognition [3] and action recognition [7]. In the case of text recognition, the system in [2] achieves competitive results in both text detection and character recognition using a simple and scalable feature learning architecture incorporating very little hand-engineering and prior knowledge.

We integrate these learned features into a large, discriminatively-trained convolutional neural network (CNN). CNNs have enjoyed many successes in simi- lar problems such as handwriting recognition [8], visual object recognition [1], and character recognition [16]. By leveraging the representational power of these net- works, we are able to train highly accurate text detection and character recognition modules. Using these mod- ules, we can build an end-to-end system with only sim- ple post-processing techniques like non-maximal sup- pression (NMS)[13] and beam search [15]. Despite its simplicity, our system achieves state-of-the-art perfor- mance on standard test sets.

2 LEARNING ARCHITECTURE

In this section, we describe our text detector and character recognizer modules, which are the essential building blocks of our full end-to-end system.Given a 32-by-32 pixel window, the detector decides whether the window contains a centered character. Similarly, the recognizer decides which of 62 characters (26 upper- case, 26 lowercase letters, and 10 digits) is in the win- dow. As described at length in Section 3, we slide the

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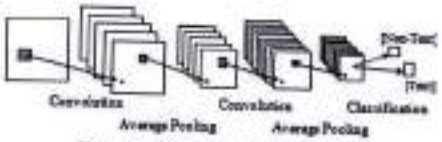

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DESIGN & IMPLEMENTATION OF CONVOLUTION NEURAL NETWORKS

[1]M A Sameer, [2]M. Iliyas, [3]Azeem Hussain, [4]Aaqib Ihraz
[2]Professor, [1,3,4]Assist. Professor
[1,2,3,4]Shadan College of Engineering and Technology, Hyderabad.
[1]Sameerk87@gmail.com

Abstract- Full end-to-end text recognition in natural images is a challenging problem that has received much atten- tion recently. Traditional systems in this area have re- lied on elaborate models incorporating carefully hand-engineered features or large amounts of prior knowl- edge. In this paper, we take another method and combine the representative power of large, multilayer neural networks together with recent developments in unsupervised feature learning, which allows us to use a common framework to train highly-accurate text detec- tor and character recognizer modules. Then, using only simple off-the-shelf methods, we integrate these two modules into a full end-to-end, lexicon-driven, scene text recognition system that achieves state-of-the-art performance on standard benchmarks, and popular streets

1 INTRODUCTION

Extracting textual information from natural images is a challenging problem with many practical applica- tions. Unlike character recognition for scanned docu- ments, recognizing text in unconstrained images is com- plicated by a wide range of variations in backgrounds, textures, fonts, and lighting conditions. As a result, many text detection and recognition systems rely on cleverly hand-engineered features [5, 4, 14] to repre- sent the underlying data. Sophisticated models such as conditional random fields [11, 19] or pictorial structures [18] are also often required to combine the raw detec- tion/recognition outputs into a complete system.

In this paper, we attack the problem from a differ- ent angle. For low-level data representation, we use an unsupervised feature learning algorithm that can auto- matically extract features from the given data. Such algorithms have enjoyed numerous successes in many

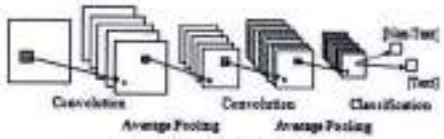

Figure 1. CNN used for text detection.

related fields such as visual recognition [3] and action recognition [7]. In the case of text recognition, the system in [2] achieves competitive results in both text detection and character recognition using a simple and scalable feature learning architecture incorporating very little hand-engineering and prior knowledge.

We integrate these learned features into a large, discriminatively-trained convolutional neural network (CNN). CNNs have enjoyed many successes in simi- lar problems such as handwriting recognition [8], visual object recognition [1], and character recognition [16]. By leveraging the representational power of these net- works, we are able to train highly accurate text detection and character recognition modules. Using these mod- ules, we can build an end-to-end system with only sim- ple post-processing techniques like non-maximal sup- pression (NMS)[13] and beam search [15]. Despite its simplicity, our system achieves state-of-the-art perfor- mance on standard test sets.

2 LEARNING ARCHITECTURE

In this section, we describe our text detector and character recognizer modules, which are the essential building blocks of our full end-to-end system.Given a 32-by-32 pixel window, the detector decides whether the window contains a centered character. Similarly, the recognizer decides which of 62 characters (26 upper- case, 26 lowercase letters, and 10 digits) is in the win- dow. As described at length in Section 3, we slide the

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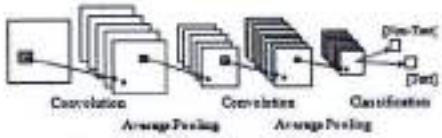

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Home > Wireless Networks > Computer Networks > Computer Science > Computer Communications (Networks) > Wireless Sensor Network

Chapter

Cluster Head Selection by Optimized Ability to Restrict Packet Drop in Wireless Sensor Networks

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In book: Soft Computing in Data Analytics (pp 453-461)

Authors:

Amairullah Khan Lodhi

Shahid Iqbal Abdul Sattar
Tabreed: District Cooling, National Central Cooling Company

Abstract

Wireless sensor networks (WSNs) are comprised of spatially distributed autonomous nodes attached to the sensors to detect and maintain physical and environmental states. Energy efficiency is an important challenge in wireless sensor networks, in which the batteries are equipped with these sensors with limited amount of power and act as a power source, which having limited storage capacities. Thus, energy efficient routing techniques are required incorporate operations of wireless sensor networks to provide the network connectivity and routing of data with less energy consumption. Clustering in WSNs is greatest widespread mechanism in routing processes. Existing energy efficient clustering algorithms selects the cluster head based on energy status. However, these protocols cause the cluster head to become bottleneck and drops the packets due to insufficient buffer. Thus in this work, we propose a novel efficient metric to select the cluster head known as "optimized ability to restrict packet drop" to enhance the network lifetime. This metric provides the status of nodes with respect to energy and memory. Calculation of residual status of an intermediate node is done by knapsack algorithm. Performance of proposed work is analyzed by NS2, and the results show that our work outperforms in comparison with existing protocols.

Article PDF Available

HIGH SPEED DYNAMIC SHIFT REGISTER FOR CONVOLUTION ENCODING AND VITERBI DECODING

April 2020

Authors:

Mohammad Ilyas
Shadan College of Engineering and Technology

Farha Anjum

Javeed Md
Sree Dattha Group of Educational Institutions

References (10) Figures (3)

Abstract and Figures

The Convolution Encoder and viterbi decryption is displayed in this paper, which will be useful for high-speed applications. While encoding and decrypting bits, bits may need to be moved either left or right. Increase timing and complexity as we perform the variable action with more bits. To overcome this we suggest the dynamic transformation function of convolution encoding and viterbi decoding. The proposed shift register shifts four bits at a time. Execution is for the code rate of 1/2, the length of the constraint 9 and the implementation of the viterbi algorithm uses the Hamming distance instead of the Euclidean distance. Using the Hamming distance reduces the complexity of the system. The proposed architecture reduces energy consumption by approximately 51% when compares with the normal shift register. The code is written in verilog HDL and synthesized in Xilinx ISE tool.

MBFF shift register a. Multi... | Timing diagram for the multi bit... | Branch metric calculation a...

Figures - uploaded by Javeed Md Author content

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HIGH SPEED DYNAMIC SHIFT REGISTER FOR CONVOLUTIC

ENCODING AND VITERBI DECODING

Dr. Mohammad Ilyas, Professor & HOD, Dept. of ECE, Shadan College of Engineering a