LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : JURNAL ILMIAH

Judul Jurnal Ilmiah (Artikel)	:	Cooperative and fair MAC protocols for cognitive radio ad-hoc networks		
Jumlah Penulis	:	2 orang		
Status Pengusul	:	penulis pertama/~~utama/Pendamping~~		
Identitas Jurnal Ilmiah	:	a. Nama Jurnal	:	**Jurnal Wireless Networks**
		b. Nomor ISSN	:	ISSN : 1022-0038
		c. Vol, No., Bln Thn	:	Vol. 23 Issue 7 Hal. 2289-2306, 1 Oktober 2017
		d. Penerbit	:	Springer New York LLC
		e. DOI artikel (jika ada)	:	Url artikel : DOI: 10.1007/s11276-016-1296-x
		f. Alamat web jurnal	:	Url Jurnal : https://link.springer.com/journal/11276
		Alamat Artikel	:	Url Scopus : https://www.scopus.com/record/display.uri?eid=2-s2.0-84969260949&origin=resultslist&sort=plf-f&src=s&sid=9f54e46c6895d961b93942e5bb311211&sot=autdocs&sdt=autdocs&sl=18&s=AU-ID%2855510072000%29&relpos=3&citeCnt=0&searchTerm=
		g. Terindex	:	Internasional Bereputasi Terindeks Scopus Q2

Kategori Publikasi Jurnal Ilmiah (beri ✓pada kategori yang tepat) :

- ☑ Jurnal Ilmiah Internasional
- ☐ Jurnal Ilmiah Nasional Terakreditasi
- ☐ Jurnal Ilmiah Nasional Tidak Terakreditasi

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Reviewer		Nilai Rata-rata
	Reviewer I	Reviewer II	
a. Kelengkapan unsur isi jurnal (10%)	4	4	4
b. Ruang lingkup dan kedalaman pembahasan (30%)	12	11	11,5
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	11	11	11
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	11	12	11,5
Total = (100%)	38	38	38

Semarang,

Reviewer 2

Dr. Wahyudi, S.T., M.T.
NIP. 196906121994031001
Unit Kerja : Teknik Elektro FT UNDIP

Reviewer 1

Dr. Eng. Wahyul Amien Syafei, ST, MT
NIP. 197112181995121001
Unit Kerja : Teknik Elektro FT UNDIP

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : JURNAL ILMIAH

Judul Jurnal Ilmiah (Artikel)	:	Cooperative and fair MAC protocols for cognitive radio ad-hoc networks		
Jumlah Penulis	:	2 orang		
Status Pengusul	:	penulis pertama/~~utama/Pendamping~~		
Identitas Jurnal Ilmiah	:	a. Nama Jurnal	:	**Jurnal Wireless Networks**
		b. Nomor ISSN	:	ISSN : 1022-0038
		c. Vol, No., Bln Thn	:	Vol. 23 Issue 7 Hal. 2289-2306, 1 Oktober 2017
		d. Penerbit	:	Springer New York LLC
		e. DOI artikel (jika ada)	:	Url artikel : DOI: 10.1007/s11276-016-1296-x
		f. Alamat web jurnal	:	Url Jurnal : https://link.springer.com/journal/11276
		Alamat Artikel	:	Url Scopus : https://www.scopus.com/record/display.uri?eid=2-s2.0-84969260949&origin=resultslist&sort=plf-f&src=s&sid=9f54e46c6895d961b93942e5bb311211&sot=autdocs&sdt=autdocs&sl=18&s=AU-ID%2855510072000%29&relpos=3&citeCnt=0&searchTerm=
		g. Terindex	:	Internasional Bereputasi Terindeks Scopus Q2

Kategori Publikasi Jurnal Ilmiah (beri ✓pada kategori yang tepat) : ☑ Jurnal Ilmiah Internasional
☐ Jurnal Ilmiah Nasional Terakreditasi
☐ Jurnal Ilmiah Nasional Tidak Terakreditasi

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Jurnal Ilmiah			Nilai Akhir Yang Diperoleh
	Internasional ☐	Nasional Terakreditasi ☐	Nasional Tidak Terakreditasi ☐	
a. Kelengkapan unsur isi jurnal (10%)	4,00			4
b. Ruang lingkup dan kedalaman pembahasan (30%)	12,00			11
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	12,00			11
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	12,00			12
Total = (100%)	**40,00**			38
0,6 × 38 = 22,80				

Catatan Penilaian artikel oleh Reviewer :

1. **Kesesuaian dan kelengkapan unsur isi jurnal:**
   Isi makalah telah lengkap dan sesuai dg petunjuk untuk penulis. Terdapat Introduction, Related work, model, proposed protocol, performance analysis, reference mutakhir
2. **Ruang lingkup dan kedalaman pembahasan:**
   Ruang lingkup yg disajikan cukup mutakhir dan dikaji secara mendalam dan lengkap pd Sesi 3-5. Hasil penelitian terelaborasi dg baik
3. **Kecukupan dan kemutakhiran data/informasi dan metodologi:**
   Referensi yg digunakan up to date. Terdapat 23 dari 27 referensi adalah dari 10 thn terakhir.
4. **Kelengkapan unsur dan kualitas terbitan:**
   Makalah ditulis dg unsur yg lengkap dan diterbitkan oleh jurnal terindeks Scopus Q-2

Semarang,
Reviewer 1

Dr. Eng. Wahyul Amien Syafei, ST, MT
NIP. 197112181995121001
Unit Kerja : Teknik Elektro FT UNDIP

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : JURNAL ILMIAH

Judul Jurnal Ilmiah (Artikel)	:	Cooperative and fair MAC protocols for cognitive radio ad-hoc networks
Jumlah Penulis	:	2 orang
Status Pengusul	:	penulis pertama/~~utama/Pendamping~~
Identitas Jurnal Ilmiah	:	a. Nama Jurnal : **Jurnal Wireless Networks**
		b. Nomor ISSN : ISSN : 1022-0038
		c. Vol, No., Bln Thn : Vol. 23 Issue 7 Hal. 2289-2306, 1 Oktober 2017
		d. Penerbit : Springer New York LLC
		e. DOI artikel (jika ada) : Url artikel : DOI: 10.1007/s11276-016-1296-x
		f. Alamat web jurnal : Url Jurnal : https://link.springer.com/journal/11276
		Alamat Artikel : Url Scopus : https://www.scopus.com/record/display.uri?eid=2-s2.0-84969260949&origin=resultslist&sort=plf-f&src=s&sid=9f54e46c6895d961b93942e5bb311211&sot=autdocs&sdt=autdocs&sl=18&s=AU-ID%2855510072000%29&relpos=3&citeCnt=0&searchTerm=
		g. Terindex : Internasional Bereputasi Terindeks Scopus Q2

Kategori Publikasi Jurnal Ilmiah (beri ✓ pada kategori yang tepat) :
- [✓] Jurnal Ilmiah Internasional
- [ ] Jurnal Ilmiah Nasional Terakreditasi
- [ ] Jurnal Ilmiah Nasional Tidak Terakreditasi

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Jurnal Ilmiah			Nilai Akhir Yang Diperoleh
	Internasional ☐	Nasional Terakreditasi ☐	Nasional Tidak Terakreditasi ☐	
a. Kelengkapan unsur isi jurnal (10%)	4,00			4
b. Ruang lingkup dan kedalaman pembahasan (30%)	12,00			11
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	12,00			11
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	12,00			12
Total = (100%)	**40,00**			38
0,6 x 38 = 22,80				

Catatan Penilaian artikel oleh Reviewer :

a) **Kesesuaian dan kelengkapan unsur isi jurnal:** [illegible]

b) **Ruang lingkup dan kedalaman pembahasan:** [illegible]

c) **Kecukupan dan kemutakhiran data/informasi dan metodologi:** [illegible]

d) **Kelengkapan unsur dan kualitas terbitan:** [illegible] Q2 Scopus

Semarang,
Reviewer 2

Dr. Wahyudi, S.T., M.T.
NIP. 196906121994031001
Unit Kerja : Teknik Elektro FT UNDIP

Document details

Back to results | 1 of 1

Export Download Print E-mail Save to PDF Add to List More...

View at Publisher

Wireless Networks
Volume 23, Issue 7, 1 October 2017, Pages 2289-2306

Cooperative and fair MAC protocols for cognitive radio ad-hoc networks (Article)

Sofwan, A. , AlQahtani, S.A.

Department of Computer Engineering, College of Computer and Information Sciences, King Saud University, Riyadh, Saudi Arabia

Abstract

View references (27)

A secondary user (SU) in multichannel cognitive radio ad hoc network (CRAHN) has a limited transmission range, which may raise a hidden multichannel sensing problem. In addition, CRAHNs can be deployed ubiquitously, and SUs from any CRAHNs could co-exist utilizing the spectrum. This situation leads to the fairness issue of spectrum resource sharing between the SUs. Both cooperative and fairness issues are important to CRAHN performance. In this paper, a cooperative and a non-cooperative multichannel (MC)-MAC protocol is proposed. In order to address the fairness issue, a fair multichannel (FMC)-MAC protocol for CRAHN is proposed, which orientates to the fairness in resource sharing. In this FMC-MAC, the SU keeps the current backoff (CB) counter when a PU appears to claim the intended channel. These proposed MAC protocols are simulated using NS2 and compared with other protocols. In addition, a mathematical model using Markov chain is constructed for FMC-MAC and the performance measures are derived. From results, the MC-MAC protocol has enhanced the network utilization and the cooperative scheme has significantly enhanced the packet delivery ratio and decreased the end-to-end delay of SUs in high traffic. The cooperative protocol enhances packet delivery ratio up to 15 % and decreases end-to-end delay down to 32 %, compared to the non-cooperative one. The FMC-MAC protocol with other two existing protocols. From the comparison results, a higher fairness has been shown by FMC-MAC CB while still maintaining a high throughput. © 2016, Springer Science+Business Media New York.

SciVal Topic Prominence

Topic: Cognitive radio | Radio systems | radio sensor

Prominence percentile: 93.778

Author keywords

Cognitive radio ad hoc network | Cooperative MAC protocol | Fairness | Multichannel MAC

Indexed keywords

Engineering controlled terms: Ad hoc networks | Markov processes | Medium access control | Radio transmission | Telecommunication networks

Engineering uncontrolled terms: Cognitive radio Ad-Hoc networks | Cooperative MAC protocols | Cooperative protocols | Fairness | Multi-channel MAC | Multichannel cognitive radios | Net work utilization | Packet delivery ratio

Engineering main heading: Cognitive radio

Metrics

0 Citations in Scopus

0 Field-Weighted Citation Impact

PlumX Metrics

Usage, Captures, Mentions, Social Media and Citations beyond Scopus.

Cited by 0 documents

Inform me when this document is cited in Scopus:

Set citation alert

Set citation feed

Related documents

Cooperative fair multichannel MAC protocol for cognitive radio ad hoc network

Sofwan, A. , AlQahtani, S.A. *(2016) ICITACEE 2015 - 2nd International Conference on Information Technology, Computer, and Electrical Engineering: Green Technology Strengthening in Information Technology, Electrical and Computer Engineering Implementation, Proceedings*

MC-MAC: An efficient multichannel MAC protocol for cognitive radio Ad Hoc Networks

Sofwan, A. , Al Qahtani, S.A. *(2016) 2015 IEEE 82nd Vehicular Technology Conference, VTC Fall 2015 - Proceedings*

Cooperative multichannel MAC protocol for cognitive radio ad hoc

Sofwan, A. , Alqahtani, S.A. *(2015) 2015 IEEE Global Communications Conference, GLOBECOM 2015*

ISSN: 10220038
CODEN: WINEF
Source Type: Journal
Original language: English
DOI: 10.1007/s11276-016-1296-x
Document Type: Article
Publisher: Springer New York LLC

References (27)

1 Zhao, Y., Song, M., Xin, C.
FMAC: A fair MAC protocol for coexisting cognitive radio networks

(2013) *Proceedings - IEEE INFOCOM*, art. no. 6566942, pp. 1474-1482. Cited 26 times.
ISBN: 978-146735946-7
doi: 10.1109/INFCOM.2013.6566942

View at Publisher

2 Kim, K.J., Kwak, K.S., Choi, B.D.
Performance analysis of opportunistic spectrum access protocol for multi-channel cognitive radio networks

(2013) *Journal of Communications and Networks*, 15 (1), pp. 77-86. Cited 39 times.
doi: 10.1109/JCN.2013.000013

View at Publisher

3 McHenry, M., Livsics, E., Nguyen, T., Majumdar, N.
XG dynamic spectrum sharing field test results

(2007) *2007 2nd IEEE International Symposium on New Frontiers in Dynamic Spectrum Access Networks*, art. no. 4221552, pp. 676-684. Cited 31 times.
ISBN: 1424406633; 978-142440663-0
doi: 10.1109/DYSPAN.2007.90

View at Publisher

4 FCC spectrum policy task force
(2002) *November*, 15, p. 2002.

5 Akyildiz, I.F., Lee, W.-Y., Vuran, M.C., Mohanty, S.
A survey on spectrum management in cognitive radio networks

(2008) *IEEE Communications Magazine*, 46 (4), pp. 40-48. Cited 1080 times.
doi: 10.1109/MCOM.2008.4481339

View at Publisher

6 Haykin, S.
Cognitive radio: Brain-empowered wireless communications

(2005) *IEEE Journal on Selected Areas in Communications*, 23 (2), pp. 201-220. Cited 8968 times.
doi: 10.1109/JSAC.2004.839380

View at Publisher

7 Zhang, Q., Fitzek, F.H.P., Iversen, V.B.
Cognitive radio MAC protocol for WLAN

(2008) *IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC*, art. no. 4699678. Cited 18 times.
ISBN: 978-142442644-7
doi: 10.1109/PIMRC.2008.4699678

View at Publisher

8 Vamsi Krishna, T., Das, A.
A survey on MAC protocols in OSA networks

(2009) *Computer Networks*, 53 (9), pp. 1377-1394. Cited 46 times.
doi: 10.1016/j.comnet.2009.01.003

View at Publisher

9 So, J., Vaidya, N.
Multi-channel MAC for ad hoc networks: Handling multi-channel hidden terminals using a single transceiver

(2004) *Proceedings of the International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc)*, pp. 222-233. Cited 877 times.

View at Publisher

10 Čabrić, D., Brodersen, R.W.
Physical layer design issues unique to cognitive radio systems

(2005) *IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC*, 2, art. no. 1651545, pp. 759-763. Cited 141 times.
ISBN: 3800729091; 978-380072909-8

11 Shi, H., Prasad, R.V., Onur, E., Niemegeers, I.G.M.M.
Fairness in wireless networks: Issues, measures and challenges

(2014) *IEEE Communications Surveys and Tutorials*, 16 (1), art. no. 6517050, pp. 5-24. Cited 136 times.
doi: 10.1109/SURV.2013.050113.00015

View at Publisher

12 Timmers, M., Pollin, S., Dejonghe, A., Van Der Perre, L., Catthoor, F.
A distributed multichannel MAC protocol for multihop cognitive radio networks

(2010) *IEEE Transactions on Vehicular Technology*, 59 (1), art. no. 5200376, pp. 446-459. Cited 148 times.
doi: 10.1109/TVT.2009.2029552

View at Publisher

13 Lo, B.F.
A survey of common control channel design in cognitive radio networks

(2011) *Physical Communication*, 4 (1), pp. 26-39. Cited 195 times.
doi: 10.1016/j.phycom.2010.12.004

View at Publisher

14 Ma, L., Han, X., Shen, C.-C.
Dynamic open spectrum sharing MAC protocol for wireless ad hoc networks

(2005) *2005 1st IEEE International Symposium on New Frontiers in Dynamic Spectrum Access Networks, DySPAN 2005*, art. no. 1542636, pp. 203-213. Cited 285 times.
ISBN: 1424400139; 978-142440013-3
doi: 10.1109/DYSPAN.2005.1542636

View at Publisher

15 Jia, J., Zhang, Q., Shen, X.
HC-MAC: A hardware-constrained cognitive MAC for efficient spectrum management

(2008) *IEEE Journal on Selected Areas in Communications*, 26 (1), pp. 106-117. Cited 528 times.
doi: 10.1109/JSAC.2008.080110

View at Publisher

16 Mishra, A., Kim, T., Masson, G.
CH-MAC: A multi-channel MAC protocol for dynamic spectrum access networks

(2013) *International Symposium on Wireless Personal Multimedia Communications, WPMC*, art. no. 6618580. Cited 5 times.

17 Kamruzzaman, S.M.
CR-MAC: A multichannel MAC protocol for cognitive radio ad hoc networks
(2010) *International Journal of Computer Networks & Communications (IJCNC)*, 2, pp. 1-14. Cited 8 times.

18 Su, H., Zhang, X.
Cross-layer based opportunistic MAC protocols for QoS provisionings over cognitive radio wireless networks

(2008) *IEEE Journal on Selected Areas in Communications*, 26 (1), pp. 118-129. Cited 552 times.
doi: 10.1109/JSAC.2008.080111

View at Publisher

19 Li, J., Luo, T., Gao, J., Yue, G.
A MAC protocol for link maintenance in multichannel cognitive radio ad hoc networks

(2015) *Journal of Communications and Networks*, 17 (2), pp. 172-183. Cited 6 times.
http://JCN.or.kr
doi: 10.1109/JCN.2015.000031

View at Publisher

20 Kalil, M.A., Puschmann, A., Mitschele-Thiel, A.
SWITCH: A multichannel MAC protocol for cognitive radio ad hoc networks

(2012) *IEEE Vehicular Technology Conference*, art. no. 6399238. Cited 11 times.
ISBN: 978-146731881-5
doi: 10.1109/VTCFall.2012.6399238

View at Publisher

21 Joshi, G.P., Nam, S.Y., Kim, S.W.
Decentralized predictive MAC protocol for Ad Hoc cognitive radio networks

(2014) *Wireless Personal Communications*, 74 (2), pp. 803-821. Cited 14 times.
doi: 10.1007/s11277-013-1322-6

View at Publisher

22 Timalsina, S.K., Moh, S., Chung, I., Kang, M.
A concurrent access MAC protocol for cognitive radio ad hoc networks without common control channel (Open Access)

(2013) *Eurasip Journal on Advances in Signal Processing*, 2013 (1), art. no. 69. Cited 14 times.
doi: 10.1186/1687-6180-2013-69

View at Publisher

23 Hu, P., Ibnkahla, M.
A MAC protocol with mobility support in cognitive radio ad hoc networks: Protocol design and analysis

(2014) *Ad Hoc Networks*, 17, pp. 114-128. Cited 11 times.
doi: 10.1016/j.adhoc.2014.01.008

View at Publisher

24 Han, H., Qi, Z.
Dynamic spectrum access in underlay cognitive radio system with SINR constraints

(2009) *Proceedings - 5th International Conference on Wireless Communications, Networking and Mobile Computing, WiCOM 2009*, art. no. 5301482. Cited 15 times.
ISBN: 978-142443693-4
doi: 10.1109/WICOM.2009.5301482

View at Publisher

25 Liu, S., Zhang, L., Zhang, Q.
Cognitive node allocation scheme for wideband spectrum sensing fairness in cognitive radio network

(2013) *IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC*, art. no. 6666568, pp. 2507-2511. Cited 4 times.
ISBN: 978-146736235-1
doi: 10.1109/PIMRC.2013.6666568

View at Publisher

26 Mesodiakaki, A., Adelantado, F., Antonopoulos, A., Alonso, L., Verikoukis, C.
Fairness evaluation of a secondary network coexistence scheme

(2013) *2013 IEEE 18th International Workshop on Computer Aided Modeling and Design of Communication Links and Networks, CAMAD 2013*, art. no. 6708113, pp. 180-184. Cited 8 times.
ISBN: 978-146734919-2
doi: 10.1109/CAMAD.2013.6708113

View at Publisher

27 *The Network Simulator–NS 2*. Cited 3352 times.
http://www.isi.edu/nsnam/ns/

AlQahtani, S.A.; Department of Computer Engineering, College of Computer and Information Sciences, King Saud University, Riyadh, Saudi Arabia; email:salmanq@ksu.edu.sa

Scopus

Source details

Visit Scopus Journal Metrics ↗

Wireless Networks

Scopus coverage years: from 1995 to 2018

Publisher: Springer Nature

ISSN: 1022-0038 E-ISSN: 1572-8196

Subject area: Engineering: Electrical and Electronic Engineering | Computer Science: Computer Networks and Communications | Computer Science: Information Systems

View all documents > | Set document alert | Journal Homepage

CiteScore 2017
2.03

SJR 2017
0.336

SNIP 2017
1.021

CiteScore | CiteScore rank & trend | Scopus content coverage

CiteScore 2017

Calculated using data from 30 April, 2018

$$2.03 = \frac{\text{Citation Count 2017}}{\text{Documents 2014 - 2016*}} = \frac{\text{1,118 Citations >}}{\text{550 Documents >}}$$

*CiteScore includes all available document types

View CiteScore methodology > CiteScore FAQ >

CiteScoreTracker 2018

Last updated on *11 April, 2019*
Updated monthly

$$2.42 = \frac{\text{Citation Count 2018}}{\text{Documents 2015 - 2017}} = \frac{\text{1,406 Citations to date >}}{\text{580 Documents to date >}}$$

CiteScore rank

Category	Rank	Percentile
Engineering Electrical and Electronic Engineering	#177/644	72nd
Computer Science Computer Networks	#78/259	70th

View CiteScore trends >

Add CiteScore to your site

Metrics displaying this icon are compiled according to Snowball Metrics ↗, a collaboration between industry and academia.

Fwd: WINE-D-15-00301 - Decision on your manuscript

From: Dr. Salman A. AlQahtani (salmanq@KSU.EDU.SA)

To: aghus@yahoo.com

Date: Saturday, 5 September 2015, 17:06 GMT+7

Please read the comments and response to them one by one

Sent by iphone .....

Best regards, salman

Dr. Salman Ali AlQahtani
Chairman of Computer Engineering Dept.
King Saud University
Riyadh, Saudi Arabia.
http://faculty.ksu.edu.sa/salmanq

Begin forwarded message:

From: "Wireless Networks (WINE)" <em@editorialmanager.com>
Date: ٢١ ذو القعدة، ١٤٣٦ هـ ١٤:٤١:٣ ص جرينتش-٤
To: salman alqahtani <salmanq@ksu.edu.sa>
Subject: WINE-D-15-00301 - Decision on your manuscript
Reply-To: "Wireless Networks (WINE)" <venkat.ganesan@springer.com>

CC: imrich.chlamtac@create-net.org, wineteic@create-net.org

Dear Dr. alqahtani:

I have received the reports from our advisors on your manuscript, "Cooperative and Fair MAC Protocols for Cognitive Radio Ad-hoc Networks", which you submitted to Wireless Networks.

Based on the advice received, I have decided that your manuscript could be reconsidered for publication should you be prepared to incorporate major revisions. When preparing your revised manuscript, you are asked to carefully consider the reviewer comments which are attached, and submit a list of responses to the comments. Your list of responses should be uploaded as a file in addition to your revised manuscript.

Also, please take note that your revision is due by Oct 05, 2015.

In order to submit your revised manuscript electronically, please access the following web site:

http://wine.edmgr.com/

Your login is: alqahtani.s
Your password is: alqahtani456336

Please click "Author Login" to submit your revision.

PLEASE NOTE: YOUR REVISED VERSION CANNOT BE IN .PS OR .PDF AS TYPESETTING CANNOT MANIPULATE THE FILES. IN ORDER TO PROCEED WITH PUBLICATION, YOUR EDITABLE SOURCE FILES ARE REQUIRED.

The system supports the following file formats:

for manuscripts − Word, WordPerfect, RTF, TXT, and LaTex;
for figures - TIFF, GIF, JPEG, EPS, and PPT.

If you have used LaTex, please include the STY files.

Submissions without editable source files will be returned for these prior to final acceptance.

I look forward to receiving your revised manuscript.

Best regards,

Prof. Xinbing Wang
Editor
Wireless Networks

COMMENTS FOR THE AUTHOR:

Reviewer #1: This paper proposes a multichannel (MC) MAC and a fair multichannel (FMC) MAC protocols for CRAHN. The topic is so old that I do not appreciate it. Besides, paper named "FMAC: A fair MAC protocol for coexisting cognitive radio networks" and paper named "Cooperative adaptive spectrum sharing in cognitive radio networks" have investigated these problems, hence I doubt the novelty of this paper. Moreover, the writing, organization and logic of this paper could be improved greatly. Some minor errors are listed as follows.
(1) Authors should illustrate differences between this paper and reference [9].
(2) Authors should give directly the performance measures in abstract.
(3) Page 1, "a cooperative and non-cooperative multichannel (MC)-MAC protocol is proposed" should be "a cooperative and a non-cooperative multichannel (MC)-MAC protocol are proposed".
(4) Page1, The sentence that "These proposed MAC protocols are simulated using NS2 and compared" is not completed.
(5) Page 2, "A cognitive radio (CR) is considered a technology innovation…" should be "A cognitive radio (CR) is considered as a technology innovation…"

Reviewer #2: This paper focuses on the hidden multichannel sensing problem in multichannel cognitive radio ad hoc network. The authors propose two MAC protocols, namely multichannel MAC and fair multichannel MAC, for CRAHN. In general, this is a solid work. However, the importance and timeliness of the topic addressed in the paper are not good enough. The following are some major concerns.

1. The topic discussed in the paper is old, and most of the cited papers were published many years ago. In addition, better to cite works that are published on high quality conferences or journals.

2. In section 4.1, what's the definition of "nearPU"?

3. In section 4.1, the protocol requires that each SU should keep the history of traffic of all nodes, which limits the implementation of the protocol in dense network. Also, this protocol may be not compatible with widely-accepted standards such as LTE-U.

4. The overhead of the proposed protocols (especially FMC-MAC) is not studied.

5. P17. A new fairness policy for each SU is proposed in this part. Better put it in previous sections and analyze its performance in this part.

Reviewer #3: This paper describes a fair mac protocol for cognitive radio networks. The protocol exploits

coordination among secondary and primary users to prevent hidden terminal problems and achieve fairness. A mathematical model based on Markov chains is used to determine some key parameters and to estimate the performance. Simulations show the advantages of the proposed approach in comparison with previous solutions.

The paper readability could be improved. Additionally, it is not clear the problem that the paper is focusing on (fairness is just a general term) and the model requires more justification. More details in the following.

- The introduction does not describe the problem well. It should better clarify the problem and contribution of the paper.

- The system model is based on several assumptions. Some of these (e.g. 100% packet delivery, circular communication area) do not seem realistic, while others (e.g. stationary PUs) need better motivation. The authors should better motivate and justify their model to improve the value of the contribution.

- The system model section contains several details of the proposed solution. This makes the readability hard. The system model should only focus on model and assumptions, moving the contribution details in an independent section.

- The system model should also describe the traffic model assumed (e.g. constant, Poisson, real traces).

- There should be a section, or a part of it, which clearly describes the problem formulation. At the current status, the paper refers to "fairness" but it never formally defines what is the objective of the proposed MAC protocol.

Minor comments:

- The paper uses too many acronyms which worsen the readability. The authors should get rid of the useless and confusing acronyms (e.g. CRAHN, CCC, etc.). The acronym "Keeps the Current Backoff" (KCB) is an unusual way of using acronyms and should be removed.

ADDITIONAL LATEX STYLE FILE INFORMATION IF NEEDED:

Questions on submitting Tex files:

What submission item should I use for a Tex file? The best submission item to use for a tex file is a "Manuscript" or similar worded submission item description.

What if my Tex file(s) doesn't build? First, look in the PDF to see if an error message is available. If the error message suggests you are missing a sty file, then this may be the cause that the Tex submission will not build. If your submission still is not building after attempting to fix your Tex file from the suggested error message, you may want to verify the following:

Are your images referenced correctly? Images cannot be referenced in subfolders, otherwise they will not appear in the PDF

Are all your accompanying files referenced correctly in your Tex file?

Why can't I submit Tex files and DVI files together? The System will accept either a Tex file(s) _OR_ a DVI file. If your DVI file does not build, then it is suggested you instead submit a Tex file. If you submit a DVI file and it does not build correctly, then you will need to provide the Tex file in order for the building problem to be researched.

What if my figures are not appearing? It may be possible that your images are referenced in subfolders. Images cannot be referenced in subfolders, otherwise they will not appear in the PDF. One example of a

correctly referenced image is: epsfig{figure=alld.eps,width=.5 extwidth} . An example of an incorrectly referenced image is: epsfig{figure=images/alld.eps,width=.5 extwidth}

What if I view large or cut off EPS images? If you view large or cut off images, then you will need to resize the image to fit on one 8.5 x 11 page. When there is a problem caused by not resizing PostScript files (the images get cut off…) the author will either need to resize the images or save the files in a format that EM can recognize as an image.(Perhaps as a TIFF or a JPEG). Please note that EPS files are the best choice for image files in Tex submissions.

Do I need to use my STY files too? Yes. The sty files will be needed to properly build your submission.

What if I see (?) Question marks in my PDF? If you see question marks in the references of your PDF, most likely your Tex file(s) are in subdirectories. Tex submissions cannot include subdirectories for your submission to properly build. All associated files must be in one directory for the submission to build.

Please note:
1) The best image/figure file types for Tex submissions are EPS files. The author should attempt to submit EPS images for all their figure files. The author should verify that their EPS images are not in subfolders, otherwise the files may not build into the submission

2) The author should look at the error generated at the end of their Tex submission. The author should verify the format of their Tex submission, as the error message suggests the Tex file may be corrupt.

3) The author should re-verify that the submission and all of their accompanying Tex related files (STY files, etc) are uploaded to the submission

4) The author should then re-build their submission.

5) The author verify their images are not in subfolders, otherwise the images may not appear.

For your reference, a sty file is:

STY is the file extension for a Style sheet file. A STYle template may be used by different publishers to define what should be bold/centered/italic in the paper.

The link below to Springer's own site can be used for latex references:

http://www.springer.com/sgw/cda/frontpage/0,,5-164-2-72376-0,00.html

We rely on the authors to create their sty files. Authors need to create their sty files to govern their own work.

There is a link below we found in Google that may assist the author in completing their submission.

http://www.sci.usq.edu.au/staff/robertsa/LaTeX/latexintro.html

TeX Web Resources

There has been a significant increase in the number of TeX submissions to journals using Editorial Manager. While we do not offer direct technical support for TeX, just as we don't offer direct technical support for Microsoft Word, we have compiled a list of TeX-related web sites for journals to use, but please do feel free to distribute this information to your authors if you deem it helpful.

FAQs about TeX

Questions on submitting Tex files:

What submission item should I use for a Tex file? The best submission item to use for a tex file is a "Manuscript" or similar worded submission item description.

What if my Tex file(s) doesn't build? First, look in the PDF to see if an error message is available. If the error message suggests you are missing a sty file, then this may be the cause that the Tex submission will not build. If your submission still is not building after attempting to fix your tex file from the suggested error message, you may want to verify the following:

Are your images referenced correctly? Images cannot be referenced in subfolders, otherwise they will not appear in the PDF

Are all your accompanying files referenced correctly in your Tex file?

Why can't I submit Tex files and DVI files together? The System will accept either a Tex file(s) _OR_ a DVI file. If your DVI file does not build, then it is suggested you instead submit a Tex file. If you submit a DVI file and it does not build correctly, then you will need to provide the Tex file in order for the building problem to be researched.

What if my figures are not appearing? It may be possible that your images are referenced in subfolders. Images cannot be referenced in subfolders, otherwise they will not appear in the PDF. An example of a correctly referenced image is: epsfig{figure=alld.eps,width=.5 extwidth} . An example of an incorrectly referenced image is: epsfig{figure=images/alld.eps,width=.5 extwidth}

What if I view large or cut off EPS images? If you view large of 'cut off images, then you will need to resize the image to fit on one 8.5 x 11 page. When there is a problem caused by not resizing PostScript files (the images get cut off…) the author will either need to resize the images or save the files in a format that EM can recognize as an image.(Perhaps as a TIFF or a JPEG).

Do I need to use my STY files too? Yes. The sty files will be needed to properly build your submission.

What if I see (?) Question marks in my PDF? If you see question marks in the references of your PDF, most likely your Tex file(s) are in subdirectories. Tex submissions cannot include subdirectories for your submission to properly build. All associated files must be in on directory for the submission to build.

Helpful TeX Links:

Beginners guide to TeX
This excellent introduction to TeX contains links to a basic explanation of TeX, a more thorough overview, and FAQs. You'll also find user help, documentation, sample documents, and a list of recommended reference books.
http://www.tug.org/begin.html

The Comprehensive TeX Archive Network
If you know absolutely nothing about TeX and would like to learn about what TeX is and where it came from, be sure to take a look at the article entitle "What it TeX?" There is a search function for files and documentation on the site as well as links to sign up for TeX users groups and announcements lists.
http://www.ctan.org/

TeX Guides
An excellent resource offering a variety of TeX guides including guides for Mathematical Symbols in TeX and TeX for Word Processor Users.
http://www.mcs.vuw.ac.nz/~david/latex/

LaTeX Encyclopedia
An online LaTeX "encyclopedia". The site contains a table of contents with links to information on documentation, installation, typography, and a Navigator for the site.
http://tex.loria.fr/

LaTeX Math Guide
The American Mathematical Society's Short Math Guide for LaTeX.
ftp://ftp.ams.org/pub/tex/doc/amsmath/short-math-guide.pdf

Fwd: WINE-D-15-00301R2 - Decision on your manuscript

From: Dr. Salman A. AlQahtani (salmanq@KSU.EDU.SA)

To: aghus@yahoo.com

Date: Wednesday, 11 May 2016, 12:08 GMT+7

Sent by iphone .....

Best regards, salman

Dr. Salman Ali AlQahtani
Computer Engineering Dept.
King Saud University
Riyadh, Saudi Arabia.
http://faculty.ksu.edu.sa/salmanq

Begin forwarded message:

From: "Wireless Networks (WINE)" <em@editorialmanager.com>
Date: ٤ شعبان، ١٤٣٧ هـ، ٧:١٧:٥١ ص جرينتش+٣
To: salman alqahtani <salmanq@ksu.edu.sa>
Subject: WINE-D-15-00301R2 - Decision on your manuscript
Reply-To: "Wireless Networks (WINE)" <venkat.ganesan@springer.com>

Dear Dr alqahtani,

We are pleased to inform you that your manuscript, "Cooperative and Fair MAC Protocols for Cognitive Radio Ad-hoc Networks", has been accepted for publication in Wireless Networks.

You will receive an e-mail from Springer in due course with regards to the following items:

1. Offprints
2. Colour figures
3. Transfer of Copyright

Please remember to quote the manuscript number, WINE-D-15-00301R2, whenever inquiring about your manuscript.

With best regards,

Prof. Xinbing Wang
Editor
Wireless Networks