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**HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW**  
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 Status Pengusul : penulis pertama/utama/Pendamping  
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 b. Nomor ISSN : ISSN : 1022-0038  
 c. Vol, No., Bln Thn : Vol. 22 Issue 1 Hal. 223-234, 1 Januari 2016  
 d. Penerbit : Springer New York LLC  
 e. DOI artikel (jika ada) : Url artikel : DOI: 10.1007/s11276-015-0969-1  
 f. Alamat web jurnal : Url Jurnal : <https://link.springer.com/journal/11276>  
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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  
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- Ruang lingkup dan kedalaman pembahasan:** cukup spesifik, akuisisi PN code untuk spread spectrum communication dan dikaji secara mendalam
- Kecukupan dan kemutakhiran data/informasi dan metodologi:** metodologi dibahas dengan mendalam pada sub seksi 3.1-3.4. Hasil disampaikan secara representative dan terelaborasi dengan baik di seksi 4
- Kelengkapan unsur dan kualitas terbitan:** Makalah diterbitkan oleh jurnal internasional bereputasi Q2 dan terindeks Scopus

Semarang,  
 Reviewer 1



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 NIP. 197112181995121001  
 Unit Kerja : Teknik Elektro FT UNDIP

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- d) **Kelengkapan unsur dan kualitas terbitan:** Unsur penulisan makalah lengkap dan kualitas terbitan bagus, terindeks Scopus Q2

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 Reviewer 2

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Wireless Networks

Volume 22, Issue 1, 1 January 2016, Pages 223-234

## PN code acquisition using smart antennas and adaptive thresholding for spread spectrum communications (Article)

Sofwan, A.<sup>a</sup> [✉](#), Barkat, M.<sup>b</sup> [✉](#), AlQahtani, S.A.<sup>a</sup> [✉](#) [👤](#)<sup>a</sup>Department of Computer Engineering, College of Computer and Information Sciences, King Saud University, Riyadh, Saudi Arabia<sup>b</sup>Department of Electrical and Computer Engineering Technology, Valencia College, Orlando, FL, United States

### Abstract

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In this paper, we consider a pseudo-noise (PN) code acquisition for direct sequence spread spectrum communication in a Rayleigh fading multipath channel environment using smart antenna and adaptive thresholding automatic trimmed-mean constant false alarm rate (ATM-CFAR) processing. A smart antenna is an array of antenna elements that can modify the array pattern adaptively to minimize the effect of multiple access interference (MAI) from other users and multipath. PN code acquisition using a fixed threshold may lead to an excessive number of false alarms, and thus, adaptive thresholding ATM-CFAR processing is considered. In addition, since the interference (MAI and multipath) can be considered as outliers, an outlier determiner is embedded to the proposed system based on the interquartile range. This novel approach of combining smart antennas and adaptive thresholding ATM-CFAR detection with an outlier determiner proved to be very robust since it resulted in a serious enhancement of the probability of detection. © 2015, Springer Science+Business Media New York.

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
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## Fwd: WINE-D-14-00058 - Decision on your manuscript

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

To: aghus@yahoo.com

Date: Thursday, 9 October 2014, 19:01 GMT+7

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Please revise the paper

Sent by iphone .....

Best regards, salman

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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](mailto:em@editorialmanager.com)>  
**Date:** ٩ أكتوبر، ٢٠١٤ ٣٥:٥٧ م جرينتش+٣  
**To:** salman alqahtani <[salmanq@ksu.edu.sa](mailto:salmanq@ksu.edu.sa)>  
**Subject:** WINE-D-14-00058 - Decision on your manuscript  
**Reply-To:** "Wireless Networks (WINE)" <[sindhuja.narayanasamy@springer.com](mailto:sindhuja.narayanasamy@springer.com)>

CC: [mario.collotta@unikore.it](mailto:mario.collotta@unikore.it)

Dear Dr salman alqahtani:

I have received the reports from our advisors on your manuscript, "PN Code Acquisition Using Smart Antennas and Adaptive Thresholding for Spread Spectrum Communications", 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 Nov 08, 2014.

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:

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,

Dr. Mario Collotta  
Editor  
Wireless Networks

#### COMMENTS FOR THE AUTHOR:

Reviewer #3: The major issue addressed in the paper is a pseudo-noise (PN) code acquisition for direct sequence spread spectrum communication in a Rayleigh fading multipath channel environment using smart antennas plus adaptive Thresholding automatic trimmed-mean constant false alarm rate (ATM-CFAR) processing with outlier determiner embedded to the proposed system based on the interquartile range. This approach is simulated and the performance of the proposed system results in a better enhancement of probability of detection for several different parameters and is proved to be robust.

Even the paper is very well written, sometimes (especially in the second section) is hard to be followed. Also, several concerns and technical corrections must be done, such as:

1. The introduction section can be divided into Introduction section plus Related work section (now all of this is in one section).
2. Please review the references [13] and [35] in order first to be the page numbers (rages) and then the years (at the end of the references) of publishing.
3. In many sentences is used "mth", "lth", in order to be precise, please rewrite them with hyphen between, like "m-th", "l-th".
4. In the subsection 2.3 when it comes a word for the LMS algorithm benefits (which you have chosen for your system calculations), it is not quite clear the "goodness" of it. Compared with which algorithm is better or is showing good accuracy and etc.?
5. In section 3 (Reults and Discussions) please provide some references or more details about the simulation environment which is used. It is same like in reference [17] or is novel simulator?
6. Please place the Figure 10 on the top of the page (not between the text), like all other figures in your paper.
7. In the end of the Section 3, for which parameters (for which case, the case with  $k_1=k_2=0$ , SNR/chip=0 dB, M=5 and M=1?) the enhancement of 115% is given? How the enhancement is calculated? If you are calculating the enhancements for Probabilities of detection (Pd) with the values Pd1=0.88 and Pd2=0.36 it should be 218 % enhancements (of Pd1 over Pd2), not 144%, as it is written.

Reviewer #5: The paper is well written and well structured but the idea proposed in this manuscript is not sufficiently innovative and efficient for the WINET journal.

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## 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=all.d.eps,width=.5 extwidth}`. An example of an incorrectly referenced image is: `epsfig{figure=images/all.d.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:

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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.

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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 entitled "What is 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>

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## Fwd: WINE-D-14-00058R2 - Decision on your manuscript

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

To: aghus@yahoo.com

Date: Monday, 27 April 2015, 15:01 GMT+7

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Sent by iphone .....

Best regards, salman

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

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**Date:** ٢ رجب، ١٤٣٦ هـ ١٥:٤٥:١٥ ص جرينتش+٣  
**To:** salman alqahtani <[salmanq@ksu.edu.sa](mailto:salmanq@ksu.edu.sa)>  
**Subject:** WINE-D-14-00058R2 - Decision on your manuscript  
**Reply-To:** "Wireless Networks (WINE)" <[sindhuja.narayanasamy@springer.com](mailto:sindhuja.narayanasamy@springer.com)>

Dear Dr alqahtani,

We are pleased to inform you that your manuscript, "PN Code Acquisition Using Smart Antennas and Adaptive Thresholding for Spread Spectrum Communications", 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-14-00058R2, whenever inquiring about your manuscript.

With best regards,

Dr. Mario Collotta  
Editor  
Wireless Networks

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