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Refereeing Process: Editor comments IJICT-135692

2 messages

Inderscience Online <noreply@indersciencemail.com>

Tue, Jul 12, 2016 at 10:00 PM

Reply-To: Inderscience Online <noreply@indersciencemail.com>, Submissions Manager <submissions@inderscience.com>

To: "PhD Student Augustinus B. Primawan" <bayu.prima@gmail.com>, "Prof Nitin K. Tripathi" <nitingis@gmail.com>, "Prof. Srikanta Patnaik" <patnaik_srikanta@yahoo.co.in>

Dear Author(s),

We have received the review reports for your paper "The Study of Access Point Outdoor Coverage Deployment for Wireless Digital Campus Network".

We require now that you implement in your submission the following recommendations made by the reviewers:

Reviewer A Comments:

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Suggestions which would improve the quality of the paper but are not essential for publication:

The paper presents a comparison of models to study the wireless signal coverage for a campus. The idea to use geospatial techniques is interesting, however the execution of this idea in this particular papers fails to impress the audience in terms of use of scientific means and methods. Following observations were made during the review process

- The grammar/language used in the paper is weak and needs major improvement
- No supporting literature is cited when discussing the techniques and why a particular technique is selected
- Literature review is weak and not coherent
- No detail is provided on how the location of APs were mapped as most of these exits inside the building and on different floors.
- Spatial distribution of APs is not discussed before applying interpolation, the spatial distribution of the input data is the most critical criteria to be taken care of before selecting an interpolation technique. RMSE is not the defining criteria
- Kriging is selected based on the fact that it was used by Muttitanon (2007). However it should be noted that Muttitanon used Kriging in indoor environment with RPs in a grid for a very small area as compared to the one defined in this paper
- Figure 1 are tables and need to be presented and explained with appropriate headers rather than pasting screenshots from software with undefined headers
- No scientific reason / calculation is given for why -7.20 was added to the env factor

Changes which must be made before publication:

- Extensive literature review is required to grasp the state of the art
- Geostatistical interpolation techniques should be studied in detail and then a particular one should be tweaked and implemented backed up by sound reasoning
- APs should be mapped with accurate level of accuracy using LRU or chain method
- In addition to RMSE, precision and accuracy of the model used should be studied using methods like cumulative probability function
- It would also be a good idea to plot the median and average distances to study the model

Suggestions which would improve the quality of the paper but are not essential for publication:

The study is interesting however it needs further work as mentioned in the reievew

Reviewer B Comments:

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Suggestions which would improve the quality of the paper but are not essential for publication:

This model is out of date. All the reference he refered is too aged.

This error is not acceptable, it's too much.

NOTE: Please send an email to the editor to acknowledge the reception of this email notification. The editor needs to make sure that messages reach the authors and don't delay the review process.

Instructions

1) To help the reviewer(s) verify that you have made the required corrections, please append a summary of the modifications made at the beginning of your revised manuscript.

2) Append figures, images and tables at the end of your revised manuscript.

3) To upload your revised version, please:

Login via <http://www.inderscience.com/ospeers/login.php>

if you do not remember your username or password, you can recover it via <http://www.inderscience.com/forgotpw.php>)

Then point your browser to

<http://www.inderscience.com/ospeers/admin/author/articlestatus.php?id=135692> and scroll-down to find the input box "Author's revised version of file".

Click on 'Browse...' to select the revised document to be submitted and click 'Upload'.

4) Click on "Editor/Author Comments" to access the referee(s) comments and possible annotated files.

5) We advise you to use MS Word to edit your submission and make sure that the revisions within the document are presented as "tracked changes" so they would be more easily seen by the editor and the reviewers. It is preferable that you upload your revised version using a MS Word file.

If you have problems uploading the file with your revised manuscript please contact submissions@inderscience.com indicating the submission ID of your article.

NOTE: In general we expect to receive your revised manuscript within three months or by the revision deadline established by the editor. Please contact the editor if you will take more than three months to resubmit your revised manuscript.

Your prompt attention is much appreciated.

Prof. Srikanta Patnaik
Int. J. of Information and Communication Technology (IJICT)
submissions@inderscience.com

bayu primawan <bayu.prima@gmail.com>

Wed, Jul 13, 2016 at 7:34 AM

To: Inderscience Online <noreply@indersciencemail.com>

Cc: nitin kumar tripathi <nitingis@gmail.com>, "Prof. Srikanta Patnaik" <patnaik_srikanta@yahoo.co.in>

Dear Sir,

Thank you for the response. I will revise the manuscript as the reviewer suggestion.

Sincerely yours

[Quoted text hidden]



bayu primawan <bayu.prima@gmail.com>

Refereeing Process: Author comments IJICT-135692

1 message

Inderscience Online <noreply@indersciencemail.com>

Tue, Sep 6, 2016 at 8:12 AM

Reply-To: Inderscience Online <noreply@indersciencemail.com>, Submissions Manager <submissions@inderscience.com>

To: "Prof. Srikanta Patnaik" <patnaik_srikanta@yahoo.co.in>, "PhD Student Augustinus B. Primawan"

<bayu.prima@gmail.com>

Reviewer A Comments:

=====

Suggestions which would improve the quality of the paper but are not essential for publication:

The paper presents a comparison of models to study the wireless signal coverage for a campus. The idea to use geospatial techniques is interesting, however the execution of this idea in this particular papers fails to impress the audience in terms of use of scientific means and methods. Following observations were made during the review process.

a. The grammar/language used in the paper is weak and needs major improvement

RESPONSE:

It has been edited/ proof read by English native person.

b. No supporting literature is cited when discussing the techniques and why a particular technique is selected

RESPONSE:

Some citation regarding the techniques have been added as part of Research Background i.e. Spatial Interpolation Method. This part relates to the previous studies in coverage map by using spatial technique. It also explains the summary of the spatial interpolation which are displayed by the table of taxonomy of spatial interpolation.

c. Literature review is weak and not coherent

RESPONSE:

Thank you so much for your comment. Review of literature in the introduction section is rewritten and revised.

d. No detail is provided on how the location of APs were mapped as most of these exits inside the building and on different floors.

RESPONSE:

This AP placement was mapped by defined AP location in the outside corridor of the building. These AP locations were used as the existing AP placement to study the coverage map behavior.

e. Spatial distribution of APs is not discussed before applying interpolation, the spatial distribution of the input data is the most critical criteria to be taken care of before selecting an interpolation technique. RMSE is not the defining criteria

RESPONSE:

The comparative study for error prediction gives the appropriate model for prediction model. Furthermore, the data distribution from each predictive model displayed in the tables. These cumulative probabilities of the prediction model gives normally distribution. So that, these model will be implemented into coverage prediction map by using interpolation technique.

Table 5 Cumulative Probability Function

(w/ obstacle) M-LD M-E M-C CPF

27.71	18.68	9.71	11%
27.92	19.03	11.19	22%
29.94	21.65	11.72	33%
31.73	23.81	12.62	44%
33.05	25.17	13.11	56%
33.96	25.21	22.51	67%
34.07	25.87	26.12	78%
34.28	26.26	26.28	89%
35.31	27.88	40.43	100%

(w/o obstacle) M-LD M-E M-C CPF

5.81	1.64	0.17	11%
11.94	2.58	2.12	22%
13.03	4.78	6.27	33%
14.66	6.21	6.63	44%
16.99	6.69	10.67	56%
20.39	9.63	13.53	67%
26.07	17.59	14.47	78%
29.81	21.53	19.03	89%
31.25	22.86	32.15	100%

Table 6 Data Signal Strength Distribution

No Model	Min	Max	Mean	Std.Dev	Skewness	Kurtosis	Median
1 Measurement	-100	-62.6	-81.29	6.7939	-0.18646	3.2363	-81.25

2 Classical -135 -105 -125.38 4.7905 0.78865 4.2629 -126
 3 Empirical -53 -23 -32.623 4.7905 -0.78865 4.2629 -35.837
 4 Cost231Hatta -110.33 -100.75 -107.41 1.579 0.77207 4.1921 -107.64

f. Kriging is selected based on the fact that it was used by Muttitanon (2007). However it should be noted that Muttitanon used Kriging in indoor environment with RPs in a grid for a very small area as compared to the one defined in this paper.

RESPONSE:

This comparative study for the coverage map with Kolyaie & Yaghooti (2011), which is the result showed that the chosen method was adequate in the same environment.

g. Figure 1 are tables and need to be presented and explained with appropriate headers rather than pasting screenshots from software with undefined headers

RESPONSE:

The experimental result has been exposed in Table 2 and every parameter explained in detail.

Table 2 Database information of APs and RPs

ID	X_Point	Y_Point	AP_ID	MAC_Addr	X_Point_1	Y_Point_1	RP_ID	Signal_Str
0	674332	1557042	AP_1	0c_85_25_ab_02_d6	674358	1556961	RP_1	-73
1	674117	1556931	AP_5	68_bc_0c_0a_6b_31	674101	1556933	RP_10	-86
2	674070	1556907	AP_8	3c_ce_73_9b_06_21	674074	1556938	RP_12	-81
3	674070	1556861	AP_9	3c_ce_73_09_7f_41	674079	1556901	RP_13	-86
...								
203	674102	1556920	AP_7	3c_ce_73_c5_ea_21	674109	1556949	RP_9	-92
204	674070	1556907	AP_8	3c_ce_73_9b_06_21	674109	1556949	RP_9	-100
205	674070	1556861	AP_9	3c_ce_73_09_7f_41	674109	1556949	RP_9	-100

ID is the identification of data number. X_Point and Y_Point are longitude and latitude of the access point location, whether X_Point_1 and Y_Point_1 are longitude and latitude of the received point location. MAC_Addr is the device address information of the access point. Signal_Str is the measured signal strength from the received point to the access point.

h. No scientific reason / calculation is given for why -7.20 was added to the env factor

RESPONSE

The difference of signal strength with the same distance was converted into antilog of the dBm. Then, the average value of the difference signal strength was reconverted into dBm that became the EF value. Based on the calculations, a value of -7.20 was added to environmental factor predictive models in equation of empirical model.

Table 3 Environment Factor Calculation

distance (m)	Signal Strength (dBm)	Difference		
Line of Sighth w/ Obstacle	Line of Sighth w/o Obstacle	dBm Antilog(dBm)		
13	-82	-67	15	3.16E-02
21	-78	-60	18	1.58E-02
32	-88	-70	18	1.58E-02
41	-90	-86	4	3.98E-01
50	-83	-69	14	3.98E-02
62	-87	-87	0	1.00E+00
72	-92	-70	22	6.31E-03
82	-91	-73	18	1.58E-02

Average of the differences 1.90E-01 -7.20

Changes which must be made before publication:

1. Extensive literature review is required to grasp the state of the art

RESPONSE:

As it mentioned in the previous response, this paper has been completed by additional literatures in coverage map and discussed in detail by adding information about spatial interpolation and its implementation for research background.

2. Geostatistical interpolation techniques should be studied in detail and then a particular one should be tweaked and implemented backed up by sound reasoning

RESPONSE:

3. APs should be mapped with accurate level of accuracy using LRU or chain method

RESPONSE:

The accuracy of the AP placement was defined by doing analysis of distance error in prediction signal strength from covered received point to the access point.

4. In addition to RMSE, precision and accuracy of the model used should be studied using methods like cumulative probability function

RESPONSE:

The comparative study for error prediction gives the appropriate model for prediction model. Furthermore, the data distribution from each predictive model displayed the tables. These cumulative probabilities of the prediction model gives normally distribution. So that, these model will be implemented into coverage prediction map by using interpolation technique.

Table 5 Cumulative Probability Function

(w/ obstacle) M-LD M-E M-C CPF

27.71 18.68 9.71 11%
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 33.05 25.17 13.11 56%
 33.96 25.21 22.51 67%
 34.07 25.87 26.12 78%
 34.28 26.26 26.28 89%
 35.31 27.88 40.43 100%

(w/o obstacle) M-LD M-E M-C CPF

5.81 1.64 0.17 11%
 11.94 2.58 2.12 22%
 13.03 4.78 6.27 33%
 14.66 6.21 6.63 44%
 16.99 6.69 10.67 56%
 20.39 9.63 13.53 67%
 26.07 17.59 14.47 78%
 29.81 21.53 19.03 89%
 31.25 22.86 32.15 100%

Table 6 Data Signal Strength Distribution

No Model	Min	Max	Mean	Std.Dev	Skewness	Kurtosis	Median
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4 Cost231Hatta	-110.33	-100.75	-107.41	1.579	0.77207	4.1921	-107.64

5. It would also be a good idea to plot the median and average distances to study the model

RESPONSE:

These distance error for prediction model of Cost231Hatta model (a) and empirical model (b) gave similar result in which the biggest error happen for the small distance and then was reduced for bigger distance. It can happen that the further distance between received point and access point, the better prediction of signal strength. Furthermore, this prediction model and interpolation technique can be implemented into coverage prediction map for access point placement. This comparative was displayed in Figure 7 of Error Prediction for (a) Cost231Hatta and (b) Empirical

Suggestions which would improve the quality of the paper but are not essential for publication:

The study is interesting however it needs further work as mentioned in the reievew

Reviewer B Comments:

=====

Suggestions which would improve the quality of the paper but are not essential for publication:

This model is out of date. All the reference he referred is too aged.

RESPONSE:

It has been revised and added new referenced regarding the study of coverage map. The model still needed to be explored in compare to find the adequate prediction in coverage signal strength prediction.

This error is not acceptable, it's too much.

RESPONSE:

It has been rewritten and revised based on reviewers comment and suggestion. I would like to thank for your valuable inputs.

PhD Student Augustinus B. Primawan

bayu.prima@gmail.com

for: Int. J. of Information and Communication Technology (IJICT)



bayu primawan <bayu.prima@gmail.com>

Final Refereeing Decision IJICT_135692

1 message

Inderscience Online <noreply@indersciencemail.com>

Sun, Oct 9, 2016 at 1:04 PM

Reply-To: Inderscience Online <noreply@indersciencemail.com>, Submissions Manager <submissions@inderscience.com>

To: bayu.prima@gmail.com, nitingis@gmail.com, Editor <patnaik_srikanta@yahoo.co.in>

Dear Augustinus B. Primawan, Nitin K. Tripathi,

Ref: Submission "The Study of Access Point Outdoor Coverage Deployment for Wireless Digital Campus Network"

Congratulations, your above mentioned submitted article has been refereed and accepted for publication in the International Journal of Information and Communication Technology. The acceptance of your article for publication in the journal reflects the high status of your work by your fellow professionals in the field.

You need now to login at <http://www.inderscience.com/login.php> and go to <http://www.inderscience.com/ospeers/admin/author/articlelist.php> to find your submission and complete the following tasks:

1. Save the "Editor's post-review version" on your local disk so you can edit it. If the file is in PDF format and you cannot edit it, use instead your last MS Word revised version, making sure to include there all the review recommendations made during the review process. Rename the new file to "authorFinalVersion."
2. Open the "authorFinalVersion" file and remove your reply or any response to reviewers that you might have in the front of your article.
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4. IMPORTANT: The paper is accepted providing that you, the author, check, edit and correct the English language in the paper. Please proofread all the text and make sure to correct any grammar and spelling mistakes.
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9. To see a sample of real articles that have been published in the International Journal of Information and Communication Technology visit <http://www.inderscience.com/info/ingeneral/sample.php?jcode=ijict>.

Finally click on the "Notify Editor" button to let the editor know that you have completed the six tasks.

Your continuing help and cooperation is most appreciated.

Best regards,

Prof. Srikanta Patnaik
Chief Editor of International Journal of Information and Communication Technology
Inderscience Publishers Ltd.
submissions@inderscience.com