

## Article Information

Article Information	
<b>ID:</b>	3842-JCS
<b>Manuscript Category:</b>	Research Articles
<b>Submitted On:</b>	Dec 3, 2013
Title	
IMPROVED REAL-TIME FACE RECOGNITION BASED ON THREE LEVEL WAVELET DECOMPOSITION-PCA AND MAHALANOBIS DISTANCE (3WPCA-MD)	
Abstract	
<p>The development of research in the field of real-time face recognition is a study that is being developed in the last decade. A facial recognition system is an application for automatically identifying or verifying a person from a digital image or a video frame from a video source. Recognition rate and computation time of real-time face recognition is one of the big challenges that must be developed. This paper proposes a model of face recognition using the method of feature extraction by combining three level wavelet decomposition and Principal Component Analysis (PCA) and using the method of Mahalanobis distance for the classification section (3WPCA-MD). A 3-level wavelet decomposition is used to decompose images by reducing the resolution used for those images. Using wavelet decomposition up to level 3 will produce an image with a very low resolution so as to reduce the value of the resulting computation time to be processed using PCA. Mahalanobis distance method is used to determine the degree of similarity among the features to produce a more optimal face recognition. Based on the results of experiments that have been done, they generated improved face recognition with high face recognition accuracy of up to 96 % in average and produced faster computation results of face recognition if compared to ordinary PCA method. The average computation speed value obtained using the method of 3WPCA-MD was 5-7 milli-second (ms) for each face recognition process.</p>	

Edy Winarno
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My Co-Authors		
Name	Email	Institutional Information
Edy Winarno <i>Corresponding Author</i>	edwinugm@gmail.com	Computer Science and Electronics, Gadjah Mada University of Indonesia, 0

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<a href="#">Similarity Report</a>	<a href="#">Similarity Report</a>	<a href="#">Jan 15, 2014</a>
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Customer Support

**On:**  
2013-12-03

December 3, 2013

**Subject:** Electronic version of Manuscript # 3842-JCS

Dear Edy Winarno,

Due to some technical problems, your file was not uploaded successfully in our system, you are therefore, requested to please login to your profile and upload your article in MS word format.

Your quick response will help us to finalize your manuscript for the coming issue.

Regards

Shakeel  
Editorial Office  
Science Publications  
<http://scipub.org>

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**Subject: RE: Electronic version of Manuscript # 3842-JCS**

**From:**  
Me

**On:**  
2013-12-04

Dear Shakeel,

I have been sent a softcopy of my paper to thescipub in pdf format, and I'll wait your respons to check my paper.

Thanks and regards  
Edy Winarno

**Subject: RE: Electronic version of Manuscript # 3842-JCS**

**From:**  
Customer Support

**On:**  
2013-12-04

Dear Edy Winarno,

Thank you for your mail.

We would appreciate if you could send the article in a DOC format.

Please feel free to contact us if you have any further queries or concerns.

Customer Support  
Science Publications, Your Local Publisher  
thescipub.com

**Subject: RE: Electronic version of Manuscript # 3842-JCS**

**From:**  
Me

**On:**  
2013-12-04

Dear Customer Support Science Pub,

Thanks for remind me, just now I have been sent a softcopy of my paper to thescipub in MSword 2010 format (docx), and I'll wait your respons to check my paper.

Thanks and regards  
Edy Winarno

**Subject: RE: Electronic version of Manuscript # 3842-JCS**

**From:**  
Me

**On:**  
2013-12-04

Dear Customer Support Science Pub,

I have been sent a softcopy of my article to thescipub in MSword 2010 format (docx), my question is how long I can get the information about the progress of my article?

Thanks and regards  
Edy Winarno

**Subject: RE: Electronic version of Manuscript # 3842-JCS**

**From:**  
Customer Support

**On:**  
2013-12-05

Dear Edy Winarno,

Thank you for your mail.

You will receive a notification about the article within 2-3 weeks.

Please feel free to contact us if you have any further queries or concerns.

Customer Support

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thescipub.com

**Subject: RE: Electronic version of Manuscript # 3842-JCS**

**From:**

Me

**On:**

2013-12-05

Dear Customer Support Science Pub,

Ok thank you for your confirmation and still waiting your notification,  
I hope the notification is not over than 2 weeks.

Thanks and regards  
Edy Winarno

**Subject: RE: Electronic version of Manuscript # 3842-JCS**

**From:**

Me

**On:**

2013-12-12

Dear Customer Support Science Pub,

I have been sent a softcopy of license agreement, and I'll wait your respons to check it.

Thanks and regards  
Edy Winarno

**Subject: RE: Electronic version of Manuscript # 3842-JCS**

**From:**

Customer Support

**On:**

2013-12-13

Dear Edy Winarno,

Thanks file received.

Please feel free to contact us if you have any further queries or concerns.

Customer Support  
Science Publications, Your Local Publisher  
thescipub.com

**Subject: RE: Electronic version of Manuscript # 3842-JCS**

**From:**

Me

**On:**

2013-12-13

OK, thank you,  
Regards

**Subject: Invoice 3842-JCS**

**From:**

Me

**On:**

2014-01-07

Dear Editorial Support,

I have been sent my revised paper in 6 pages,  
and your invoice 3842-JCS mentioned 525 AUD,

Would you like change the invoice becoming 450 AUD (only 6 pages) ?

After I receive your confirmation about the new invoice (450 AUD), I will pay as soon as possible,

Waiting your confirmation

Thanks and Regards,  
Edy Winarno

**Download:**

**Subject: RE: Invoice 3842-JCS**

**From:**

Customer Support

**On:**

2014-01-08

Dear Edy Winarno,

Thank you for your mail.

The minimum charges for an article under 8 pages is 525 AUD.

Please feel free to contact us if you have any further queries or concerns.

Customer Support  
Science Publications, Your Local Publisher  
thescipub.com

**Subject: RE: Invoice 3842-JCS**

**From:**

Me

**On:**

2014-01-08

Dear Editorial Support,

It's ok, I will pay 525 AUD soon.

Yesterday I sent to you my final revised paper, did you read it and agree to publish that?

Or I still wait your confirmation about my paper again?

Please give notice about it, and after I receive your confirmation, I will pay your invoice 525 AUD.

Waiting your confirmation

Thanks and Regards,  
Edy Winarno

**Subject: RE: Invoice 3842-JCS****From:**

Customer Support

**On:**

2014-01-09

Dear Edy Winarno,

Thank you for your mail.

We have received the revised file and it has been accepted.

Please feel free to contact us if you have any further queries or concerns.

Customer Support  
Science Publications, Your Local Publisher  
thescipub.com

**Subject: RE: Invoice 3842-JCS****From:**

Me

**On:**

2014-01-09

Dear Editorial Support,

Thank you for your confirmation.  
When the dead line of payment to me?  
When my final file/paper will be published?

Waiting your confirmation

Thanks and Regards,  
Edy Winarno

**Subject: RE: Invoice 3842-JCS**

**From:**

Customer Support

**On:**

2014-01-09

Dear Edy Winarno,

Thank you for your mail.

There is no deadline however the sooner the better. The article will be published 1-2 weeks after the payment has been received.

Please feel free to contact us if you have any further queries or concerns.

Customer Support  
Science Publications, Your Local Publisher  
thescipub.com

**Subject: RE: Invoice 3842-JCS**

**From:**

Me

**On:**

2014-01-09

Dear Customer Support,

Thank you for your info  
I will contact you again after I pay your invoice

Thanks and Regards,



Edy Winarno

**Subject: Payment Reminder for Manuscript # 3842-JCS sent on January 12, 2014**

**From:**

Customer Support

January 12, 2014

**On:**

2014-01-12

**Subject:** Payment Reminder for Manuscript # 3842-JCS sent on January 12, 2014

Dear Edy Winarno,

May God bless you with good health.

Your above manuscript entitled "IMPROVED REAL-TIME FACE RECOGNITION BASED ON THREE LEVEL WAVELET DECOMPOSITION-PCA AND MAHALANOBIS DISTANCE (3WPCA-MD)" was under consideration for the current issue of Journal of Computer Science. But our record shows that so far we did not receive printing/processing cost of this manuscript.

To avoid further delay in publication, you are requested to send us printing cost as soon as possible.

In case, you have already paid printing/processing cost, please provide us complete detail of payment with method of payment for the updation of our database.

Please treat this message on TOP PRIORITY.

Regards

Shakeel  
Editorial Office  
Science Publications  
<http://scipub.org>

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**Subject: RE: Payment Reminder for Manuscript # 3842-JCS sent on January 12, 2014**

**From:**

Me

**On:**

2014-01-13

Dear Customer Support

Thank you for remind me  
Until now I still wait the disbursement of funds from my office  
In this week, I will pay the invoice of manuscript # 3842-JCS.  
I will contact you again after I pay the invoice.

Thanks and regards  
Edy Winarno

**Subject: Request to revise my paper****From:**

Me

**On:**

2014-01-06

Dear JCS:

I received your notification about my paper just now, and the comment from you is "The paper can be accepted for publication".

But, I want to change a few content of my paper. may I do to change it ?

If I have a chance, I will send you my final revised of my paper.

Hopefully you will give me more information about it.

Waiting your confirmation

Thanks and Regards.  
Edy Winarno

**Download:****Subject: RE: Request to revise my paper****From:**

Customer Support

**On:**

2014-01-07

Dear Edy Winarno,

Thank you for your mail.

You can send the revised file and it will be published soon.

Please feel free to contact us if you have any further queries or concerns.

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**Subject: RE: Request to revise my paper**

**From:**

Me

**On:**

2014-01-07

Dear Customer Support

Thank for your confirmation,  
I have been sent my last revised file, please check it and I hope it will be published soon.  
Thank you verymuch for your quick response.

Regards,  
Edy Winarno

**Subject: similarity index is relatively high**

**From:**

Me

**On:**

2014-01-16

Dear Customer Support

Today I will try to revise my article as your note to reduce the percentage of similarity index.  
I will send my revised article after I finish it.  
Hope you feel free to waiting my revised article.

Thanks and regards  
Edy Winarno

**Subject: Your Submission Needs Revision# 3842-JCS entitled as IMPROVED  
REAL-TIME FACE RECOGNITION BASED ON TH**

**From:**

Customer Support

January 15, 2014

**On:**

2014-01-15

**Subject:** Your Submission Needs Revision# 3842-JCS entitled as IMPROVED REAL-TIME FACE RECOGNITION BASED ON THREE LEVEL WAVELET DECOMPOSITION-PCA AND MAHALANOBIS DISTANCE (3WPCA-MD)

**Download:**

**Subject: RE: Your Submission Needs Revision# 3842-JCS entitled as IMPROVED REAL-TIME FACE RECOGNITION BASED O**

**From:**

Me

**On:**

2014-01-15

Dear Shakeel,  
Editorial Office  
Science Publications

Herewith I sent to you my payment of invoice number 3842-JCS, full amount, AUD 525.

Hope you will check it and give me information if you receive it.

By the way, I read your email today about "Your Submission Needs Revision", actually I don't understand about that.

Should i revise my paper ? because your previous email note that my paper was accepted and ready to be published after I pay the invoice.

But your email today note that my paper must be revised.

My questions are :

1. This is your note : "You have no need to resend your un-composed manuscript again"  
what is the meaning of that ? should I revise and resend ?
2. But if I no need to revise and no need to resend my paper so what should I do ? Or I only wait my paper to be published ? (because i have been pay the invoice)

Waiting your confirmation soon

Thank and regards  
Edy Winarno

**Subject: RE: Your Submission Needs Revision# 3842-JCS entitled as IMPROVED REAL-TIME FACE RECOGNITION BASED O**

**From:**

Customer Support

**On:**

2014-01-15

Dear Edy Winarno,

Thank you for your mail.

The article's similarity index is relatively high. We recommend that you reduce this percentage.

Please feel free to contact us if you have any further queries or concerns.

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thescipub.com

**Subject: RE: Your Submission Needs Revision# 3842-JCS entitled as IMPROVED REAL-TIME FACE RECOGNITION BASED O**

**From:**

Me

**On:**

2014-01-16

Dear Shakeel,  
Editorial Office  
Science Publications

Herewith I sent to you my payment of invoice number 3842-JCS, full amount, AUD 525.

Hope you will check it and give me information if you receive it.

By the way, I read your email today about "Your Submission Needs Revision", actually I don't understand about that.

Should i revise my paper ? because your previous email note that my paper was accepted and ready to be published after I pay the invoice.

But your email today note that my paper must be revised.

My questions are :

1. This is your note : "You have no need to resend your un-composed manuscript again" what is the meaning of that ? should I revise and resend ?
2. But if I no need to revise and no need to resend my paper so what should I do ? Or I only wait my paper to be published ? (because i have been pay the invoice)

Waiting your confirmation soon

Thank and regards  
Edy Winarno

**Subject: RE: Your Submission Needs Revision# 3842-JCS entitled as  
IMPROVED REAL-TIME FACE RECOGNITION BASED O**

**From:**

Me

**On:**

2014-01-17

Dear Shakeel,  
Editorial Office  
Science Publications

Herewith I send my final revised article today  
I have been completed my revised article like reviewers suggest to me :  
1. I change and use several new cited journal in my final article  
2. I try to reduce the article's similarity index by changing several words in my article

Please check my revised article and give me confirmation soon  
I have been sent my printing cost of invoice 3842-JCS AUD 525 full amount

Thanks and regards  
Edy Winarno

**Subject: RE: Your Submission Needs Revision# 3842-JCS entitled as  
IMPROVED REAL-TIME FACE RECOGNITION BASED O**

**From:**

Customer Support

**On:**

2014-01-17

Dear Edy Winarno,

Thank you for your mail.

We will process the article and inform you of the status soon.

Please feel free to contact us if you have any further queries or concerns.

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**Subject: Soft Copy Received**

**From:**

Customer Support

December 13, 2013

**Subject:** Soft Copy Received

Dear Edy Winarno,

We hope you will receive this letter with good health.

It is to notify that we have received the soft copy of the above mentioned article safely.

This is just for your kind information.

Regards

Shakeel  
Editorial Office  
Science Publications  
<http://scipub.org>

**Download:**

**Subject: RE: Soft Copy Received**

**From:**

Me

To : editorial office

I recieved your information about my paper (3842-JCS) just now ?  
what should I do after that ? I must still waiting your another info or I must to revise my paper  
?  
please give me much more information.

**On:**

2013-12-13

**On:**

2014-01-06

thanks and regard  
Edy Winarno

**Importance of the topics/issues to the field of research**

---

Important

**Quality of writing and other presentations (figures, tables, exhibits)**

---

Good

**Conceptual rigor (clarity of objectives, treatment of relevant literature, logical reasoning)**

---

Good

**Methodological rigor (research design, sampling, data collection/analyses as relevant to qualitative/quantitative data)--skip if NA**

---

Good

**General discussion and conclusions (implications, limitations, future research)**

---

Good

**Paper's contribution to research in its current form**

---

Modest

**Contribution if revised according to my accompanying comments** 

---

Modest

**Recommendation**

---

Accept unconditionally

**Comments**

---

The paper can be accepted for publication



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**On:**

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**On:**

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Dear Edy Winarno,

Thank you for your mail.

An invoice has been sent.

Please feel free to contact us if you have any further queries or concerns.

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