

RE: Update for the paper to ISWC 2015 (deadline 10th of April)

Christopher Baber

Sent: Saturday, April 04, 2015 9:49 AM

To: Miguel Perez Xochicale

Dear Miguel

Some suggestions:

1 for the references please can you put the date after the author names and not where it is currently? I'm not sure whether date at the end is a latex thing but it looks wrong.

2 in the description of Takens, can you draw a flowchart of the process you follow to go from sensor data to final figure via PCA? Imagine you are writing a short guide for someone using your software and write instructions for them.

3. Include eigenvalues for the PCA components you use. It would be good to have a table showing eigenvalues for all the components extracted for each analysis you report. This would show what percentage of total variance is explained by the two components you are using.

4. You need to explain what data are being analysed using PCA - at the moment you don't explain this at all.

You don't need more data (and the table comparing figures is excellent - I have written a few hundred words on this already). - but you do need more explanation of how to do time-delay embedding. The purpose of the paper is to introduce the conference audience to this way of analysis and to illustrate the use of the approach to analyse dance.

I have written an abstract too. I will send that this evening. It has taken forever because I couldn't print or edit the version of PDF you sent, so had to save it in text file and been working on that. Future papers would be easier to collaborate on if you used word, and future analysis of PCA would be really easy with SPSS (especially in terms of calculating statistics about the eigenvalues and percentage variance).

Enjoy London

Best wishes

Chris

From: Miguel Perez Xochicale

Sent: 03 April 2015 20:29

To: Christopher Baber

Subject: RE: Update for the paper to ISWC 2015 (deadline 10th of April)

I am just updating all the references on the LaTeX template. Give me 30 minutes :)

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Doctoral Researcher in Nonlinear Dynamics Approach to Human Activity Recognition
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From: Christopher Baber
Sent: Friday, April 03, 2015 8:27 PM
To: Miguel Perez Xochicale
Subject: RE: Update for the paper to ISWC 2015 (deadline 10th of April)

How is the paper coming along?

From: Miguel Perez Xochicale
Sent: 01 April 2015 10:36
To: Neil Cooke; Christopher Baber
Subject: RE: Update for the paper to ISWC 2015 (deadline 10th of April)

Find attached a draft version of the paper. I am still working with the analysis which is not added yet.

Miguel

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From: Neil Cooke
Sent: Wednesday, April 01, 2015 8:49 AM
To: Miguel Perez Xochicale
Cc: Christopher Baber
Subject: Re: Update for the paper to ISWC 2015 (deadline 10th of April)

I will be in from about 10am this morning to discuss this as agreed. Let me know when you want to meet. N

Regards

Neil
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On 26 Mar 2015 11:28, Miguel Perez Xochicale <MAP479@student.bham.ac.uk> wrote:
Dear All,

You are going to receive my LaTeX version of the paper by evening of 1st of April. Then you can send me your contributions and feedback to the paper and I will rebuild the TeX file until you are satisfied. I remind you that the dead

line is on 10th of April.

For my part, I am reading the literature regarding the skills assessment with inertial sensors and recognition of dance. The following paragraph regarding skill assessment is what I have done so far.

I am analyzing the results of Hammerla et~al. \cite{Hammerla2011} in which they quantified the skill assessment using the cumulative energy distribution in Principal Component Analysis. Their work evaluate the self-similarity of activity motions in which six subjects are asked ``to whisk cream for 5 minutes with a sensor-equipped utensil.''

Experiments showed that subjects with superior motor skills perform the activities in a precise and regular motion while less skilled subjects performed the activity with no coordination and varies over time. Although the integration of the cumulative energy of the PCA quantify well the skill of users, their method was not tested with complex activities. In the same fashion, no further evidence is made than mentioning that noisy signals can be disrupted for analyzing the complexity of time-series.

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@article{Hammerla2011,
author = {Nils Hammerla and Thomas Ploetz and Peter Andras and Patrick Olivier},
journal = {Proc. Int. Workshop on Frontiers in Activity Recognition using
Pervasive Sensing (in conjunction with Pervasive 2011)},
title = {{Assessing Motor Performance with PCA}},
year = {2011},
url={http://homepages.cs.ncl.ac.uk/patrick.olivier/hammerla-IWFAR2011.pdf}
}
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Miguel

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<https://sites.google.com/site/perezxochicale/>

From: Miguel Perez Xochicale
Sent: Wednesday, March 25, 2015 12:24 PM
To: Christopher Baber; Neil Cooke
Subject: Next Meeting

Dear All,

I have finished some extra analysis of the data that I would like to discuss with you. When do you have time for a meeting?

Miguel

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