

Behavioral Pattern Prediction. Development of an Optimal Model for Signal Decoding while Modeling Brain-Computer Interface

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ABSTRACT

Brain activity can be used as a control signal for brain-computer interface (BCI). This signal can be further interpreted, predicting behavioral patterns of the subject. In the following paper a system is investigated, using multiscale approach for input signal preprocessing, attribute selection and further pattern modeling. The model takes into account the continuity of trajectory of motion and presence of both discrete and continuous structural variables. <METHODS USED><RESULTS>

Introduction

The Introduction section, of referenced text¹ expands on the background of the work (some overlap with the Abstract is acceptable). The introduction should not include subheadings.

Results

Up to three levels of **subheading** are permitted. Subheadings should not be numbered.

Subsection

Example text under a subsection. Bulleted lists may be used where appropriate, e.g.

- First item
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Topical subheadings are allowed.

Discussion

The Discussion should be succinct and must not contain subheadings.

Methods

Topical subheadings are allowed. Authors must ensure that their Methods section includes adequate experimental and characterization data necessary for others in the field to reproduce their work.

References

1. Figueredo, A. J. & Wolf, P. S. A. Assortative pairing and life history strategy – a cross-cultural study. *Hum. Nat.* **20**, 317–330, DOI: <https://doi.org/10.1007/s12110-009-9068-2> (2009).
2. Hao, Z., AghaKouchak, A., Nakhjiri, N. & Farahmand, A. Global integrated drought monitoring and prediction system (GIDMaPS) data sets. *figshare* <http://dx.doi.org/10.6084/m9.figshare.853801> (2014).

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For data citations of datasets uploaded to e.g. *figshare*, please use the `howpublished` option in the bib entry to specify the platform and the link, as in the `Hao:gidmaps:2014` example in the sample bibliography file.

Acknowledgements (not compulsory)

Acknowledgements should be brief, and should not include thanks to anonymous referees and editors, or effusive comments. Grant or contribution numbers may be acknowledged.

Author contributions statement

Must include all authors, identified by initials, for example: A.A. conceived the experiment(s), A.A. and B.A. conducted the experiment(s), C.A. and D.A. analysed the results. All authors reviewed the manuscript.

Additional information

To include, in this order: **Accession codes** (where applicable); **Competing interests** (mandatory statement).
The corresponding author is responsible for submitting a [competing interests statement](#) on behalf of all authors of the paper. This statement must be included in the submitted article file.



Figure 1. Legend (350 words max). Example legend text.

Condition	n	p
A	5	0.1
B	10	0.01

Table 1. Legend (350 words max). Example legend text.

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