



Machine Learning for Bioclimatic Modelling

Maumita Bhattacharya

(Submitted on 12 Mar 2013)

Many machine learning (ML) approaches are widely used to generate bioclimatic models for prediction of geographic range of organism as a function of climate. Applications such as prediction of range shift in organism, range of invasive species influenced by climate change are important parameters in understanding the impact of climate change. However, success of machine learning-based approaches depends on a number of factors. While it can be safely said that no particular ML technique can be effective in all applications and success of a technique is predominantly dependent on the application or the type of the problem, it is useful to understand their behavior to ensure informed choice of techniques. This paper presents a comprehensive review of machine learning-based bioclimatic model generation and analyses the factors influencing success of such models. Considering the wide use of statistical techniques, in our discussion we also include conventional statistical techniques used in bioclimatic modelling.

Comments: 8 pages

Subjects: **Learning (cs.LG)**; Applications (stat.AP)

MSC classes: 97R30

Journal reference: (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 4, No. 2, 2013, pp. 1-8

Cite as: **arXiv:1303.2739 [cs.LG]**
(or **arXiv:1303.2739v1 [cs.LG]** for this version)

Submission history

From: Maumita Bhattacharya [[view email](#)]
[v1] Tue, 12 Mar 2013 01:13:44 GMT (323kb)

[Which authors of this paper are endorsers?](#)

Link back to: [arXiv](#), [form interface](#), [contact](#).

Download:

- [PDF only](#)

Current browse context:

cs.LG

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1303](#)

Change to browse by:

cs

stat

[stat.AP](#)

References & Citations

- [NASA ADS](#)

DBLP - CS Bibliography

[listing](#) | [bibtex](#)

[Maumita Bhattacharya](#)

Bookmark (what is this?)

