



The R Package BHAM: Fast and Scalable Bayesian Hierarchical Additive Model for High-dimensional Data

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Abstract

The abstract of the article.

Keywords: keywords, not capitalized, Java.

1. Introduction

2. Bayesian Hierarchical Additive Model

2.1. Generalized Additive Model

2.2. Cox Proportional Hazard Model

3. R Functions

3.1. Model fitting

High-dimension Smoothing Formula

```
R> x <- 1:10
```

```
R> x
```

```
[1] 1 2 3 4 5 6 7 8 9 10
```

Model Fitting

Covariate Adjustment

3.2. Model Summary

Functional Selection

Curve Plotting

Model Performance

4. Metabolomics Data Analysis with **BHAM**

4.1. Contious Outcome

4.2. Binary Outcome

4.3. Survival Outcome

5. Conclusion

This template demonstrates some of the basic LaTeX that you need to know to create a JSS article.

5.1. Code formatting

In general, don't use Markdown, but use the more precise LaTeX commands instead:

- `Java`
- `plyr`

One exception is inline code, which can be written inside a pair of backticks (i.e., using the Markdown syntax).

If you want to use LaTeX commands in headers, you need to provide a `short-title` attribute. You can also provide a custom identifier if necessary. See the header of Section 6 for example.

6. R code

Can be inserted in regular R markdown blocks.

6.1. Features specific to `rticles`

- Adding short titles to section headers is a feature specific to **`rticles`** (implemented via a Pandoc Lua filter). This feature is currently not supported by Pandoc and we will update this template if **it is officially supported in the future**.
- Using the `\AND` syntax in the `author` field to add authors on a new line. This is a specific to the `rticles::jss_article` format.

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