

Stochastic Gradient Ascent in maxLik

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1 maxLik and Stochastic Gradient Ascent

`maxLik` is a package, primarily intended with Maximum Likelihood and related estimations. Besides of its name, it also includes a number of tools geared for a typical Maximum Likelihood workflow.

However, as predictive modeling and complex (deep) models have gained popularity in the recent decade, `maxLik` also includes a few popular algorithms for stochastic gradient ascent, the mirror image for the more widely known stochastic gradient descent.

Simulated data for the problem are in the dataset `logit`. There are five variables in the data set, the response `y` and four predictors, `x1`, `x2`, `x3`, and `x4`.

A frequentist analysis for the problem is done by the following R statements

```
> library(maxLik)
> a <- 1
> print(a)
```

```
[1] 1
```