

## What does GLM?

`glm` is used to fit generalized linear models, specified by a symbolic description of the linear predictor and a description of the error distribution.

`glm` returns a class object inherited from `"glm"` which inherits from the class `"lm"`.

`glm.fit` is the workhorse function: it is not normally called directly, but it can be more efficient when the response vector, design matrix, and family have already been calculated.

The function `summary` (that is, `summary.glm`) can be used to get or print a summary of the results, and the function `anova` (that is, `anova.glm`) to produce an analysis of variance table.

Generic access functions `coefficients`, `effects`, `fitted.values` and `residuals` can be used to extract various useful features from the value returned by `glm`.

An object of class `"glm"` is a list containing at least the following components:

- `coefficients`  
a named vector of coefficients
- `residuals`  
the residuals of work, that is, the residuals in the final iteration of the IWLS setting. Since zero weight cases are omitted, your work residuals are NA.
- `fitted.values`  
the fitted mean values, obtained by transforming the linear predictors by the inverse of the link function.
- `range`  
The numerical range of the fitted linear model.
- `family`  
The `family` object used.

1. R Documentation. (sf). `glm` function | R Documentation. Retrieved May 29, 2020, from <https://www.rdocumentation.org/packages/stats/versions/3.6.2/topics/glm>