

0.1 Zelig-package: Zelig: Everyone's Statistical Software

Description

Zelig is an easy-to-use program that can estimate, and help interpret the results of, an enormous range of statistical models. It literally is “everyone’s statistical software” because Zelig’s simple unified framework incorporates everyone else’s (R) code. We also hope it will become “everyone’s statistical software” for applications and teaching, and so have designed Zelig so that anyone can easily use it or add their programs to it. Zelig also comes with infrastructure that facilitates the use of any existing method, such as by allowing multiply imputed data for any model, and mimicking the program Clarify (for Stata) that takes the raw output of existing statistical procedures and translates them into quantities of direct interest.

Details

Package: Zelig
 Version: 2.8-5
 Date: 2007-06-12
 Depends: R (\geq 2.4.0), MASS, boot
 Suggests: VGAM (\geq 0.7-1), MCMCpack (\geq 0.7-4), mvtnorm, survival, sandwich (\geq 2.0-0), zoo (\geq 1.8-4)
 License: GPL version 2 or newer
 URL: <http://gking.harvard.edu/zelig>

Index:

approval	U.S. Presidential Approval Data
coalition	Coalition Dissolution in Parliamentary Democracies
current.packages	Find all packages in a dependency chain
dims	Return Dimensions of Vectors, Arrays, and Data Frames
eidat	Simulation Data for Ecological Inference
friendship	Simulated Example of Schoolchildren Friendship Network
gsource	Read Data As a Space-Delimited Table
help.zelig	HTML Help for Zelig Commands and Models
hoff	Social Security Expenditure Data

immigration	Individual Preferences Over Immigration Policy
macro	Macroeconomic Data
match.data	Output matched data sets
MatchIt.url	Table of links for Zelig
mexico	Voting Data from the 1988 Mexican Presidential Election
mi	Bundle multiply imputed data sets as a list
mid	Militarized Interstate Disputes
model.end	Cleaning up after optimization
model.frame.multiple	Extracting the "environment" of a model formula
model.matrix.multiple	Design matrix for multivariate models
network	Format matrices into a data frame for social network analysis
newpainters	The Discretized Painter's Data of de Piles
parse.formula	Parsing user-input formulas into multiple syntax
parse.par	Select and reshape parameter vectors
PERisk	Political Economic Risk Data from 62 Countries in 1987
plot.ci	Plotting Vertical confidence Intervals
plot.zelig	Graphing Quantities of Interest
put.start	Set specific starting values for certain parameters
repl	Replicating Analyses
rocplot	Receiver Operator Characteristic Plots
sanction	Multilateral Economic Sanctions
set.start	Set starting values for all parameters
setx	Setting Explanatory Variable Values
sim	Simulating Quantities of Interest
sna.ex	Simulated Example of Social Network Data
summary.zelig	Summary of Simulated Quantities of Interest
SupremeCourt	U.S. Supreme Court Vote Matrix
swiss	Swiss Fertility and Socioeconomic Indicators (1888) Data
ternaryplot	Ternary diagram
ternarypoints	Adding Points to Ternary Diagrams
tobin	Tobin's Tobit Data
turnout	Turnout Data Set from the National Election Survey
user.prompt	Pause in demo files
Weimar	1932 Weimar election data
zelig	Estimating a Statistical Model

<code>zeligDepStatus</code>	Zelig Dependencies Packages Client Status
<code>zeligDepUpdate</code>	Download Zelig Dependencies Packages
<code>zeligDescribeModelXML</code>	Zelig interface functions
<code>Zelig-package</code>	Everyone's Statistical Software
<code>Zelig.url</code>	Table of links for Zelig
<code>zideal</code>	Zelig Matrix of Dependencies

Further information is available in the following vignettes:

<code>arima</code>	ARIMA Models for Time Series Data (source)
<code>blogit</code>	Bivariate Logistic Regression for Two Dichotomous Dependent Variables (source)
<code>bprobit</code>	Bivariate Probit Regression for Dichotomous Dependent Variables (source)
<code>ei.RxC</code>	Hierarchical Multinomial-Dirichlet Ecological Inference Model (source)
<code>ei.dynamic</code>	Quinn's Dynamic Ecological Inference (source)
<code>ei.hier</code>	Hierarchical Ecological Inference Model (source)
<code>exp</code>	Exponential Regression for Duration Dependent Variables (source)
<code>factor.bayes</code>	Bayesian Factor Analysis (source)
<code>factor.mix</code>	Mixed Data Factor Analysis (source)
<code>factor.ord</code>	Ordinal Data Factor Analysis (source)
<code>gam.logit</code>	gam.logit: Generalized Additive Model for Dichotomous Dependent Variables (source)
<code>gam.normal</code>	Generalized Additive Model for Continuous Dependent Variables (source)
<code>gam.poisson</code>	Generalized Additive Model for Count Dependent Variables (source)
<code>gam.probit</code>	Generalized Additive Model for Dichotomous Dependent Variables (source)
<code>gamma</code>	Gamma Regression for Continuous, Positive Dependent Variables (source)
<code>irt1d</code>	One Dimensional Item Response Mode (source)
<code>irtkd</code>	K-Dimensional Item Response Model (source)
<code>logit</code>	Logistic Regression for Dichotomous Dependent Variables (source)
<code>logit.bayes</code>	Bayesian Logistic Regression for Dichotomous Dependent Variables (source)
<code>logit.gee</code>	Generalized Estimating Equation for Logistic Regression (source)
<code>lognorm</code>	Log-Normal Regression for Duration Dependent Variables (source)
<code>ls</code>	Least Squares Regression for Continuous Dependent Variables (source)
<code>mlogit</code>	Multinomial Logistic Regression for Dependent Variables with Unordered Categorical
<code>mlogit.bayes</code>	Bayesian Multinomial Logistic Regression for Dependent Variables with Unordered C
<code>mloglm</code>	Multinomial Log-Linear Regression for Contingency Table Models (source)
<code>negbin</code>	Negative Binomial Regression for Event Count Dependent Variables (source)
<code>netcloglog</code>	Least Squares Regression for Continuous Dependent Variables (source)
<code>netgamma</code>	Least Squares Regression for Continuous Dependent Variables (source)
<code>netlogit</code>	Least Squares Regression for Continuous Dependent Variables (source)
<code>netls</code>	Network Least Squares Regression for Continuous Proximity Matrix Dependent Varia
<code>netnormal</code>	Least Squares Regression for Continuous Dependent Variables (source)
<code>netpoisson</code>	Least Squares Regression for Continuous Dependent Variables (source)
<code>netprobit</code>	Least Squares Regression for Continuous Dependent Variables (source)
<code>normal</code>	Normal Regression for Continuous Dependent Variables (source)

<code>normal.bayes</code>	Bayesian Normal Linear Regression (source)
<code>ologit</code>	Ordinal Logistic Regression for Ordered Categorical Dependent Variables (source)
<code>oprobit</code>	Ordinal Probit Regression for Ordered Categorical Dependent Variables (source)
<code>oprobit.bayes</code>	Bayesian Ordered Probit Regression (source)
<code>poisson</code>	Poisson Regression for Event Count Dependent Variables (source)
<code>poisson.bayes</code>	Bayesian Poisson Regression (source)
<code>probit</code>	Probit Regression for Dichotomous Dependent Variables (source)
<code>probit.bayes</code>	Bayesian Probit Regression for Dichotomous Dependent Variable (source)
<code>relogit</code>	Rare Events Logistic Regression for Dichotomous Dependent Variables (source)
<code>sur</code>	Seemingly Unrelated Regression (source)
<code>threesls</code>	Three Stage Least Squares (source)
<code>tobit</code>	Linear regression for Left-Censored Dependet Variable (source)
<code>tobit.bayes</code>	Bayesian Linear Regression for a Censored Dependent Variable (source)
<code>twosls</code>	Two Stage Least Squares (source)
<code>weibull</code>	Weibull Regression for Duration Dependent Variables (source)

Author(s)

Kosuke Imai jkimai@Princeton.Edu, Gary King jking@harvard.edu, Olivia Lau lolau@fas.harvard.edu

Maintainer: Kosuke Imai jkimai@Princeton.Edu