

nesse.sty
Guide to useage
v.0.5

Hans Nesse

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The `nesse.sty` file is a simple style file which calls some frequently used packages and defines some commands which are useful in typesetting statistics.

1 Installing the file

Put the file into the appropriate place in the root directory. I only have experience with MikTeX, where the root directory is `c:/texmf/tex/latex`. Then build the MikTeX filename database by opening MikTeX options from the start menu, and clicking the “refresh now” button on the “general” tab.

To use the file, simply call it in the header, as `\usepackage{nesse}`.

2 Packages which nesse.sty calls

The file calls five packages which I have often found myself using:

`amsmath` Provides a collection of math-related shortcuts, full documentation at <ftp://ftp.ams.org/pub/tex/doc/amsmath/amsldoc.pdf>

`amssymb` A collection of math symbols from the American Mathematical Society

`mathrsfs` Provides the Ralph Smith Formal Script, which is a nice mathematical script for equations.

`multirow` Allows for table headers to span several rows.

`graphicx` General graphics engine for importing graphics files into \LaTeX .

3 New commands

Call	Symbol	Description
<code>\E</code>	E	Expected value.
<code>\independ</code>	$\perp\!\!\!\perp$	A relation between two random variables indicating independence, as in $X \perp\!\!\!\perp Y$, which is read “ X is independent of Y .”
<code>\notindepend</code>	$\not\perp\!\!\!\perp$	A relation indicating two random variables are not independent.
<code>\iid</code>	i.i.d.	Indicates a collection of random variables are independent, identically distributed according to the distribution which follows. For example $X_i \text{i.i.d. Normal}(\mu, \sigma^2)$ indicates all X_i random variables are independent of each other and identically distributed.
<code>\var</code>	Var	Variance.
<code>\cor</code>	Cor	Correlation.
<code>\cov</code>	Cov	Covariance.
<code>\raiseto{d}</code>	\xrightarrow{d}	It is probably not the slickest way to do this, but the command creates an arrow with a letter above it.
<code>\D{x}{y}</code>	$\frac{\partial y}{\partial x}$	Partial derivative.
<code>\DD{x}{y}</code>	$\frac{\partial^2 y}{\partial x^2}$	Second partial derivative.
<code>\Dn{x}{y}{k}</code>	$\frac{\partial^k y}{\partial x^k}$	Any partial derivative.