

# Package ‘ExtractTrainData’

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**Type** Package

**Title** Extract Values from Raster

**Version** 9.1.5

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**Description** By using a multispectral image and ESRI shapefile (Point/ Line/ Polygon), a data table will be generated for classification, regression or other processing. The data table will be contained by band wise raster values and shapefile ids (User Defined).

**License** GPL-3

**Repository** CRAN

**Depends** raster,rgdal, sp

**Imports** rgeos

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 7.1.0

**NeedsCompilation** no

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ExtractByLine      *Add a Line shapefile and raster image.*

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**Description**

Add a Line shapefile and raster image.

**Usage**

```
ExtractByLine(img, line.shp, In.colName, Out.colName)
```

**Arguments**

img	Raster image
line.shp	Line shapefile with class info
In.colName	Name of the column contain line id's
Out.colName	Name of the output column contain line id's

**Author(s)**

Subhadip Datta

**Examples**

```
library(raster)
library(ExtractTrainData)
img<-brick(system.file("extdata","ras.tif",package = "ExtractTrainData"))
line.shp<-shapefile(system.file("extdata","lines.shp",package = "ExtractTrainData"))
Out.colName<-In.colName<-"Id"
ExtractByLine(img,line.shp,In.colName,Out.colName)
```

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ExtractByPoint      *Add a Point shapefile and raster image.*

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**Description**

Add a Point shapefile and raster image.

**Usage**

```
ExtractByPoint(img, point.shp, In.colName, Out.colName)
```

**Arguments**

img	Raster image
point.shp	Point shapefile with class info
In.colName	Name of the column contain point id's
Out.colName	Name of the output column contain point id's

**Author(s)**

Subhadip Datta

**Examples**

```
library(raster)
library(ExtractTrainData)
img<-brick(system.file("extdata","ras.tif",package = "ExtractTrainData"))
point.shp<-shapefile(system.file("extdata","poin.shp",package = "ExtractTrainData"))
Out.colName<-In.colName<-"Id"
ExtractByPoint(img,point.shp,In.colName,Out.colName)
```

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ExtractByPoly	<i>Add a Polygon shapefile and raster image.</i>
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**Description**

Add a Polygon shapefile and raster image.

**Usage**

```
ExtractByPoly(img, poly.shp, In.colName, Out.colName)
```

**Arguments**

img	Raster image
poly.shp	Polygon shapefile with class info
In.colName	Name of the column contain polygon id's
Out.colName	Name of the output column contain polygon id's

**Author(s)**

Subhadip Datta

**Examples**

```
library(raster)
library(ExtractTrainData)
img<-brick(system.file("extdata","ras.tif",package = "ExtractTrainData"))
poly.shp<-shapefile(system.file("extdata","poly_shp.shp",package = "ExtractTrainData"))
Out.colName<-In.colName<-"Id"

ExtractByPoly(img,poly.shp,In.colName,Out.colName)
```

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