

# IceMan - Text Rendering

'it' can render text into images using FreeType. Two functions support this.

## **ice.Image DrawString(*string*, [*width*, *height*], [*family*, *style*])**

This function creates a single-channel, 8-bit image with the specified string rendered into it. The returned image has a box such that  $(0, 0)$  is at the string baseline. The actual height of the image depends on the string itself, but it is always possible to render a line of text in pieces just by translating by the X size of the previous string rendered.

### Parameters

*string*

String to be rendered (str)

[*width*, *height*]

Nominal width and height of each character in pixels (list).

[*family*, *style*]

(Optional) Font family to use, e.g. *Courier* (str) and font style to use, e.g. *Bold* (str). Users are encouraged to use the lists returned from `ice.FontChoices()`.

### Example

# Hello World!

```
# Make the "Hello"
f = ice.FontChoices()[0]
label1 = ice.DrawString("Hello ", (50, 50), f)
label2 = ice.DrawString("World!", (50, 50), f)
# X offset calculation: just grab the x size of the first label
# and use it to translate the second before addition
offset = [label1.DataBox()[1], 0]
result = label1.Add(label2.Translate(offset))
```

The above example illustrates the utility of the origin being at the baseline: individual strings have different bounding boxes, but are arranged such that concatenation simply requires the use of an x offset. Note that for the purposes of the above example we could just have rendered both words as a single string.

*DrawString* always returns a single-channel, 8-bit image. IceMan's built-in operations can be used very easily to create color and transparency as desired.

## **list FontChoices(*fontMapFile*)**

## **list FontChoices(*family*, *style*, *path*)**

This function returns a List of Lists enumerating the various font family-style combinations available for use. If called with no arguments it returns the list of fonts installed on the current system. If called with a single file name argument that file is expected to be a text file where each line has three tab delimited columns of "family", "style" and "font file path". To define a mapping between a family and style to a particular font file use the second form of `FontChoices`.

### Parameters

*fontMapFile*

(Optional) File to get font mappings from. (str)

*family*

(Optional) A font family name (str).

*style*

(Optional) The style name (str).

*path*

(Optional) Path to the font file (str).

## Example

```
# List all the fonts that are currently available for use
for f in ice.FontChoices(): print
```