Image Segmentation Project

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1 Class Index 1

1.1 Class List . . . 1

2 File Index 3

2.1 File List . . . 3

3 Class Documentation 5

3.1 BMPHeader Struct Reference . . . 5

3.1.1 Detailed Description . . . 5

3.1.2 Member Data Documentation . . . 5

3.1.2.1 bfOffBits . . . 5

3.1.2.2 bfReserved . . . 6

3.1.2.3 bfSize . . . 6

3.1.2.4 bfType . . . 6

3.1.2.5 biBitCount . . . 6

3.1.2.6 biClrImportant . . . 6

3.1.2.7 biClrUsed . . . 6

3.1.2.8 biCompression . . . 7

3.1.2.9 biHeight . . . 7

3.1.2.10 biPlanes . . . 7

3.1.2.11 biSize . . . 7

3.1.2.12 biSizeImage . . . 7

3.1.2.13 biWidth . . . 7

3.1.2.14 biXPelsPerMeter . . . 8

3.1.2.15 biYPelsPerMeter . . . 8

3.2 contenedor_de_parametros_de_control Struct Reference . . . 8

3.2.1 Detailed Description . . . 8

3.2.2 Member Data Documentation . . . 8

3.2.2.1 cx . . . 9

3.2.2.2 cy . . . 9

3.2.2.3 height . . . 9

3.2.2.4 pathAndInputImageFileName . . . 9

3.2.2.5 pathOfOutputDirectory . . . 9

3.2.2.6 r . . . 9

3.2.2.7 v1x . . . 10

3.2.2.8 v1y . . . 10

3.2.2.9 v2x . . . 10

3.2.2.10 v2y . . . 10

3.2.2.11 v3x . . . 10

3.2.2.12 v3y . . . 10

3.2.2.13 width . . . 11

3.2.2.14 xf . . . 11

3.2.2.15 xi . . . 11

3.2.2.16 yf . . . 11
3.2.2.17 yi . . . 11
3.3 pInputImage Struct Reference . . . 12
3.3.1 Detailed Description . . . 12
3.3.2 Member Data Documentation . . . 12
3.3.2.1 c1 . . . 12
3.3.2.2 c2 . . . 13
3.3.2.3 funcion_vero . . . 13
3.3.2.4 height . . . 13
3.3.2.5 histograma . . . 13
3.3.2.6 m . . . 13
3.3.2.7 m1 . . . 13
3.3.2.8 m2 . . . 14
3.3.2.9 medidas_estadisticas . . . 14
3.3.2.10 ms . . . 14
3.3.2.11 p . . . 14
3.3.2.12 pdrawnCircleOnIntensity . . . 14
3.3.2.13 pdrawnLinealSegmentOnIntensity . . . 14
3.3.2.14 pdrawnTriangleOnIntensity . . . 15
3.3.2.15 pimagensegmentada . . . 15
3.3.2.16 pintensity . . . 15
3.3.2.17 pmeanImage . . . 15
3.3.2.18 pmeanImage_uc . . . 15
3.3.2.19 prgb . . . 15
3.3.2.20 pvarianceImage . . . 16
3.3.2.21 pvarianceImage_uc . . . 16
3.3.2.22 var . . . 16
3.3.2.23 varianza1 . . . 16
3.3.2.24 varianza2 . . . 16
3.3.2.25 width . . . 16

4 File Documentation **17**

4.1 main.c File Reference . . . 17

Index **19**

Chapter 1

Class Index

1.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

BMPHeader 5
contenedor_de_parametros_de_control 8
pInputImage 12

Chapter 2

File Index

2.1 File List

Here is a list of all files with brief descriptions:

main.c 17

Chapter 3

Class Documentation

3.1 BMPHeader Struct Reference

Public Attributes

- char bfType [3]
- int bfSize
- int bfReserved
- int bfOffBits
- int biSize
- int biWidth
- int biHeight
- short biPlanes
- short biBitCount
- int biCompression
- int biSizeImage
- int biXPelsPerMeter
- int biYPelsPerMeter
- int biClrUsed
- int biClrImportant

3.1.1 Detailed Description

Definition at line 1133 of file main.c.

3.1.2 Member Data Documentation

3.1.2.1 bfOffBits

```
int BMPHeader::bfOffBits
```

Definition at line 1138 of file main.c.

3.1.2.2 bfReserved

```
int BMPHeader::bfReserved
```

Definition at line 1137 of file main.c.

3.1.2.3 bfSize

```
int BMPHeader::bfSize
```

Definition at line 1136 of file main.c.

3.1.2.4 bfType

```
char BMPHeader::bfType[3]
```

Definition at line 1135 of file main.c.

3.1.2.5 biBitCount

```
short BMPHeader::biBitCount
```

Definition at line 1143 of file main.c.

3.1.2.6 biClrImportant

```
int BMPHeader::biClrImportant
```

Definition at line 1150 of file main.c.

3.1.2.7 biClrUsed

```
int BMPHeader::biClrUsed
```

Definition at line 1148 of file main.c.

3.1.2.8 biCompression

```
int BMPHeader::biCompression
```

Definition at line 1144 of file main.c.

3.1.2.9 biHeight

```
int BMPHeader::biHeight
```

Definition at line 1141 of file main.c.

3.1.2.10 biPlanes

```
short BMPHeader::biPlanes
```

Definition at line 1142 of file main.c.

3.1.2.11 biSize

```
int BMPHeader::biSize
```

Definition at line 1139 of file main.c.

3.1.2.12 biSizeImage

```
int BMPHeader::biSizeImage
```

Definition at line 1145 of file main.c.

3.1.2.13 biWidth

```
int BMPHeader::biWidth
```

Definition at line 1140 of file main.c.

3.1.2.14 biXPelsPerMeter

```
int BMPHeader::biXPelsPerMeter
```

Definition at line 1146 of file main.c.

3.1.2.15 biYPelsPerMeter

```
int BMPHeader::biYPelsPerMeter
```

Definition at line 1147 of file main.c.

The documentation for this struct was generated from the following file:

- main.c

3.2 contenedor_de_parametros_de_control Struct Reference

Public Attributes

- int width
- int height
- char pathAndInputImageFileName [256]
- char pathOfOutputDirectory [256]
- int xi
- int yi
- int xf
- int yf
- int cx
- int cy
- int r
- int v1x
- int v1y
- int v2x
- int v2y
- int v3x
- int v3y

3.2.1 Detailed Description

Definition at line 59 of file main.c.

3.2.2 Member Data Documentation

3.2.2.1 cx

```
int contenedor_de_parametros_de_control::cx
```

Definition at line 69 of file main.c.

3.2.2.2 cy

```
int contenedor_de_parametros_de_control::cy
```

Definition at line 70 of file main.c.

3.2.2.3 height

```
int contenedor_de_parametros_de_control::height
```

Definition at line 62 of file main.c.

3.2.2.4 pathAndInputImageFileName

```
char contenedor_de_parametros_de_control::pathAndInputImageFileName[256]
```

Definition at line 63 of file main.c.

3.2.2.5 pathOfOutputDirectory

```
char contenedor_de_parametros_de_control::pathOfOutputDirectory[256]
```

Definition at line 64 of file main.c.

3.2.2.6 r

```
int contenedor_de_parametros_de_control::r
```

Definition at line 71 of file main.c.

3.2.2.7 v1x

```
int contenedor_de_parametros_de_control::v1x
```

Definition at line 72 of file main.c.

3.2.2.8 v1y

```
int contenedor_de_parametros_de_control::v1y
```

Definition at line 73 of file main.c.

3.2.2.9 v2x

```
int contenedor_de_parametros_de_control::v2x
```

Definition at line 74 of file main.c.

3.2.2.10 v2y

```
int contenedor_de_parametros_de_control::v2y
```

Definition at line 75 of file main.c.

3.2.2.11 v3x

```
int contenedor_de_parametros_de_control::v3x
```

Definition at line 76 of file main.c.

3.2.2.12 v3y

```
int contenedor_de_parametros_de_control::v3y
```

Definition at line 77 of file main.c.

3.2.2.13 width

```
int contenedor_de_parametros_de_control::width
```

Definition at line 61 of file main.c.

3.2.2.14 xf

```
int contenedor_de_parametros_de_control::xf
```

Definition at line 67 of file main.c.

3.2.2.15 xi

```
int contenedor_de_parametros_de_control::xi
```

Definition at line 65 of file main.c.

3.2.2.16 yf

```
int contenedor_de_parametros_de_control::yf
```

Definition at line 68 of file main.c.

3.2.2.17 yi

```
int contenedor_de_parametros_de_control::yi
```

Definition at line 66 of file main.c.

The documentation for this struct was generated from the following file:

- main.c

3.3 pInputImage Struct Reference

Public Attributes

- int width
- int height
- unsigned char * prgb
- unsigned char * pintensity
- int histograma [256]
- double p [256]
- double m
- double ms
- double var
- unsigned char * pdrawnLinealSegmentOnIntensity
- unsigned char * pdrawnCircleOnIntensity
- unsigned char * pdrawnTriangleOnIntensity
- double medidas_estadisticas [3]
- int funcion_vero
- double c1
- double c2
- double m1
- double m2
- double varianza1
- double varianza2
- unsigned char * pimagensegmentada
- double * pmeanImage
- unsigned char * pmeanImage_uc
- double * pvarianceImage
- unsigned char * pvarianceImage_uc

3.3.1 Detailed Description

Definition at line 36 of file main.c.

3.3.2 Member Data Documentation

3.3.2.1 c1

```
double pInputImage::c1
```

Definition at line 50 of file main.c.

3.3.2.2 c2

```
double pInputImage::c2
```

Definition at line 50 of file main.c.

3.3.2.3 funcion_vero

```
int pInputImage::funcion_vero
```

Definition at line 49 of file main.c.

3.3.2.4 height

```
int pInputImage::height
```

Definition at line 39 of file main.c.

3.3.2.5 histograma

```
int pInputImage::histograma[256]
```

Definition at line 42 of file main.c.

3.3.2.6 m

```
double pInputImage::m
```

Definition at line 44 of file main.c.

3.3.2.7 m1

```
double pInputImage::m1
```

Definition at line 50 of file main.c.

3.3.2.8 m2

```
double pInputImage::m2
```

Definition at line 50 of file main.c.

3.3.2.9 medidas_estadisticas

```
double pInputImage::medidas_estadisticas[3]
```

Definition at line 48 of file main.c.

3.3.2.10 ms

```
double pInputImage::ms
```

Definition at line 44 of file main.c.

3.3.2.11 p

```
double pInputImage::p[256]
```

Definition at line 43 of file main.c.

3.3.2.12 pdrawnCircleOnIntensity

```
unsigned char* pInputImage::pdrawnCircleOnIntensity
```

Definition at line 46 of file main.c.

3.3.2.13 pdrawnLinealSegmentOnIntensity

```
unsigned char* pInputImage::pdrawnLinealSegmentOnIntensity
```

Definition at line 45 of file main.c.

3.3.2.14 pdrawnTriangleOnIntensity

```
unsigned char* pInputImage::pdrawnTriangleOnIntensity
```

Definition at line 47 of file main.c.

3.3.2.15 pimagensegmentada

```
unsigned char* pInputImage::pimagensegmentada
```

Definition at line 51 of file main.c.

3.3.2.16 pintensity

```
unsigned char* pInputImage::pintensity
```

Definition at line 41 of file main.c.

3.3.2.17 pmeanImage

```
double* pInputImage::pmeanImage
```

Definition at line 52 of file main.c.

3.3.2.18 pmeanImage_uc

```
unsigned char* pInputImage::pmeanImage_uc
```

Definition at line 53 of file main.c.

3.3.2.19 prgb

```
unsigned char* pInputImage::prgb
```

Definition at line 40 of file main.c.

3.3.2.20 pvarianceImage

```
double* pInputImage::pvarianceImage
```

Definition at line 54 of file main.c.

3.3.2.21 pvarianceImage_uc

```
unsigned char* pInputImage::pvarianceImage_uc
```

Definition at line 55 of file main.c.

3.3.2.22 var

```
double pInputImage::var
```

Definition at line 44 of file main.c.

3.3.2.23 varianza1

```
double pInputImage::varianza1
```

Definition at line 50 of file main.c.

3.3.2.24 varianza2

```
double pInputImage::varianza2
```

Definition at line 50 of file main.c.

3.3.2.25 width

```
int pInputImage::width
```

Definition at line 38 of file main.c.

The documentation for this struct was generated from the following file:

- main.c

Chapter 4

File Documentation

4.1 main.c File Reference

```
#include <stdio.h>
#include <stdlib.h>
#include <math.h>
#include <string.h>
```

Include dependency graph for main.c:

Index

bfOffBits
    BMPHeader, 5
bfReserved
    BMPHeader, 5
bfSize
    BMPHeader, 6
bfType
    BMPHeader, 6
biBitCount
    BMPHeader, 6
biClrImportant
    BMPHeader, 6
biClrUsed
    BMPHeader, 6
biCompression
    BMPHeader, 6
biHeight
    BMPHeader, 7
biPlanes
    BMPHeader, 7
biSize
    BMPHeader, 7
biSizeImage
    BMPHeader, 7
biWidth
    BMPHeader, 7
biXPelsPerMeter
    BMPHeader, 7
biYPelsPerMeter
    BMPHeader, 8
BMPHeader, 5
    bfOffBits, 5
    bfReserved, 5
    bfSize, 6
    bfType, 6
    biBitCount, 6
    biClrImportant, 6
    biClrUsed, 6
    biCompression, 6
    biHeight, 7
    biPlanes, 7
    biSize, 7
    biSizeImage, 7
    biWidth, 7
    biXPelsPerMeter, 7
    biYPelsPerMeter, 8

c1
    pInputImage, 12
c2
    pInputImage, 12
contenedor_de_parametros_de_control, 8
    cx, 8
    cy, 9
    height, 9
    pathAndInputImageFileName, 9
    pathOfOutputDirectory, 9
    r, 9
    v1x, 9
    v1y, 10
    v2x, 10
    v2y, 10
    v3x, 10
    v3y, 10
    width, 10
    xf, 11
    xi, 11
    yf, 11
    yi, 11
cx
    contenedor_de_parametros_de_control, 8
cy
    contenedor_de_parametros_de_control, 9

funcion_vero
    pInputImage, 13

height
    contenedor_de_parametros_de_control, 9
    pInputImage, 13
histograma
    pInputImage, 13

m
    pInputImage, 13
m1
    pInputImage, 13
m2
    pInputImage, 13
main.c, 17
medidas_estadisticas
    pInputImage, 14
ms
    pInputImage, 14

p
    pInputImage, 14
pathAndInputImageFileName
    contenedor_de_parametros_de_control, 9
pathOfOutputDirectory

contenedor_de_parametros_de_control, 9
pdrawnCircleOnIntensity
pInputImage, 14
pdrawnLinealSegmentOnIntensity
pInputImage, 14
pdrawnTriangleOnIntensity
pInputImage, 14
pimagensegmentada
pInputImage, 15
pInputImage, 12
c1, 12
c2, 12
funcion_vero, 13
height, 13
histograma, 13
m, 13
m1, 13
m2, 13
medidas_estadisticas, 14
ms, 14
p, 14
pdrawnCircleOnIntensity, 14
pdrawnLinealSegmentOnIntensity, 14
pdrawnTriangleOnIntensity, 14
pimagensegmentada, 15
pintensity, 15
pmeanImage, 15
pmeanImage_uc, 15
prgb, 15
pvarianceImage, 15
pvarianceImage_uc, 16
var, 16
varianza1, 16
varianza2, 16
width, 16
pintensity
pInputImage, 15
pmeanImage
pInputImage, 15
pmeanImage_uc
pInputImage, 15
prgb
pInputImage, 15
pvarianceImage
pInputImage, 15
pvarianceImage_uc
pInputImage, 16

r
contenedor_de_parametros_de_control, 9

v1x
contenedor_de_parametros_de_control, 9
v1y
contenedor_de_parametros_de_control, 10
v2x
contenedor_de_parametros_de_control, 10
v2y
contenedor_de_parametros_de_control, 10
v3x
contenedor_de_parametros_de_control, 10
v3y
contenedor_de_parametros_de_control, 10
var
pInputImage, 16
varianza1
pInputImage, 16
varianza2
pInputImage, 16

width
contenedor_de_parametros_de_control, 10
pInputImage, 16

xf
contenedor_de_parametros_de_control, 11
xi
contenedor_de_parametros_de_control, 11

yf
contenedor_de_parametros_de_control, 11
yi
contenedor_de_parametros_de_control, 11