FABEMD

- width : unsigned int
- height : unsigned int
- size : unsigned int
- variance : float
- threshold : float

- maximumAllowableIterations : unsigned int

- osfwType : OSFW

- windowWidthMax : unsigned int - windowWidthMin : unsigned int

input : Clmgbimf : Clmg

lowerEnvelope : CImgupperEnvelope : CImgaverageEnvelope : CImgupperKernel : CImglowerKernel : CImg

localMinimas : vector<Extrema>localMaximas : vector<Extrema>

- buildExtremasMaps(): void

- assignNearests(extremas : vector<Extrema>) : void

standardDeviation(): float
 extremaCount(): unsigned int
 computeFiltersWidths(): void
 computeLowerEnvelope(): void
 computeUpperEnvelope(): void

 $+ \ \mathsf{FABEMD} (\mathsf{input}: \mathsf{CImg}, \mathsf{osfwType}: \mathsf{OSFW}, \mathsf{maximumAllowableIterations}: \mathsf{unsigned} \ \mathsf{int},$

size: unsigned int, threshold: float)

+ execute() : Clmg

-osfwType

<<enumeration>>

OSFW

- SAME_TYPE_1

- SAME_TYPE_2

- SAME_TYPE_3

- SAME_TYPE_4

- DIFFERENT_TYPE_1

- DIFFERENT_TYPE_2

- DIFFERENT_TYPE_3

- DIFFERENT_TYPE_4

Extrema - x : unsigned int 1..* - localMaximas - y: unsigned int - distance : float + Extrema(unsigned int x, unsigned int y) + x(): unsigned int + y(): unsigned int + distance(): float + setX(x : unsigned int) : void 1..* - localMinimas + setY(y: unsigned int): void + setDistance(distance : float) : void + distanceTo(extrema: Extrema): float