

```

function Correlation = CorrelationOfAdjacentPixels(Image)
%Sceglie n coppie casuali di pixel adiacenti e ne calcola la
    correlazione
Width = size(Image,1);
Height = size(Image,2);
PixelCouplesSample = 6000;

x1 = randi(Width,1,PixelCouplesSample);
y1 = randi(Height,1,PixelCouplesSample);
x2 = mod(x1+1,Width+1)+(x1==Width);
y2 = mod(y1+1,Height+1)+(y1==Height);

xs = zeros(1,PixelCouplesSample);
ys = zeros(1,PixelCouplesSample);
for i = 1:PixelCouplesSample
    xs(i) = Image(x1(i),y1(i));
    ys(i) = Image(x2(i),y2(i));
end

Correlation = corr2(xs,ys);
end

```