diffEncoder

This function encodes a black and white image into a single vector using differential coding

```
function [ encodedVector ] = diffEncoder( BWImg )
% Input:
%   BWImg: black and white image i.e. a Y frame
%
% Output:
%   encodedVector: the BWImg encoded into a single vector through
%       differential-encoding.


[rowSize, colSize] = size(BWImg);       % We need to know how many columns there i
encodedImg = zeros(rowSize, colSize);   % Placeholder for the encoded-img.

BWImg = double(BWImg);                  %Original type is uin8. uin8 cant be negat

for colIndex = 1: colSize               %For every column..

    if colIndex == 1                    %If first column, save as reference-value
        encodedImg(:, 1) = BWImg(:,1);

    else                                %Calculate difference between indexed colu
        encodedImg(:, colIndex) = BWImg(:, colIndex) - BWImg(:, colIndex - 1);

    end
end

encodedVector = reshape(encodedImg, [], 1); %Reshape the matrix C x R into a singl
```

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