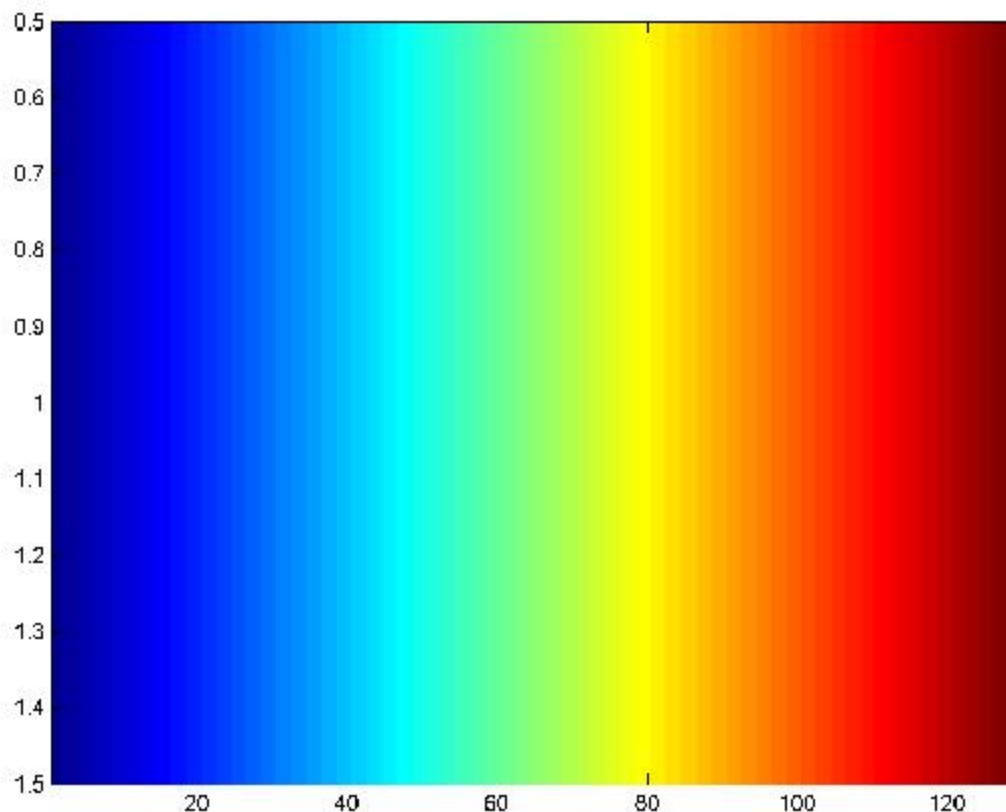


100/100. Excellent work. -JZ



I made an array, f that was $[0:(1/127):1]$, so from 0 to 1 in 128 segments, to ensure I had 128 different colors, each one will be my line. Because f should be a value no lower than 0, and no higher than 1, I chose to normalize it to between 0 and 1, instead of making 1 to 128. Each line is an array of length 3. So, f will become my colormap, a 128×3 matrix. Then using the algorithm on page 133 of the Telea book I created the formulas for R,G,B for each value of the 128 different lines. Then using another for loop, I assigned those values to the first, second and third indices of each individual index in my colormap. The result being 128 rows of 3 values each. Each of the rows is an individual color of [R,G,B] form. Then I did a simple addition to calculate the actual [R,G,B] values from any given f in the interval [0,1]

$$g = (6-2*dx)*f+dx$$
$$R = \max(0, (3-|g-4|-|g-5|)/2)$$
$$G = \max(0, (4-|g-2|-|g-4|)/2)$$
$$B = \max(0, (3-|g-1|-|g-2|)/2)$$

$$f = 0.3$$
$$g = 2.12$$
$$R = \max(0, -0.88) = 0$$
$$G = \max(0, 1) = 1$$
$$B = \max(0, 0.88) = 0.88$$

$$f = 0.8$$
$$g = 4.32$$
$$R = \max(0, 1) = 1$$
$$G = \max(0, 0.68) = 0.68$$
$$B = \max(0, -1.32) = 0$$

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[R,G,B] = [0,1,0.88]

[R,G,B] = [1,0.68,0]