

```

313 % are to be looked up.
314
315 % Dummy variables intended to optimize speed
316 tVar1 = (1/res); % Multiplication is faster than divi
317 tVar2 = length(funTable)/2;
318
319 Y = funTable(ceil(X*tVar1+tVar2));
320 % -----
321
322 % ----- SHOWGRAPHS -----
323 function showGraphs(j,alpha,tMin,tMax,sigma,egagTable
324 %SHOWGRAPHS Displays graphs of thresholding and enhan
325 x = linspace(-1,1,1/res);
326 numC = floor(j/2);
327 % Plot softThresh for fine scale levels of DWT
328 fig1 = figure;
329 set(fig1,'Name','Thresholding and enhancement functio
330 for channel = 1:numC
331     subplot(1,numC+1,channel);
332     plot(x,softThresh(x, tMax, tMin, sigma, alpha, ch
333     axis square;title(sprintf('softThreshold in chann
334     xlabel x;ylabel('softThresh(x)');
335 end
336 %Plot egag function
337 subplot(1,numC+1,numC+1);plot(x,lookUp(egagTable,res,
338 title('Generalized Adaptive Gain function');xlabel x;
339 % -----
340
341 function [ x1 x2 ] = getUserCoordinates(img)
342 %GETUSERCOORDINATES
343 % [ X1 X2 ] = GETUSERCOORDINATES(IMG)
344 % Lets the user choose two points in an image and ret
345 % the coordinates of each point in the row vectors X1
346
347 x1 = zeros(1,2);
348 x2 = zeros(1,2);
349
350 fig = figure;
351 imshow(img,[min(img(:)),max(img(:))]);axis image;colo
352 set(fig,'Name','Select area for estimation of standar
353
354 disp('Select upper left corner of preferred area with
355 t = waitforbuttonpress;
356 [x1(1,1) x1(1,2)] = ginput(1);
357 disp('Select lower right corner of preferred area wit
358 t = waitforbuttonpress;
359 [x2(1,1) x2(1,2)] = ginput(1);
360
361 x1 = ceil(x1);
362 x2 = floor(x2);
363 close(fig);
364 % -----

```