

```

                                generate_category_mask (1)
function [not_mask mask] = generate_category_mask(I, anchor_tree, delta_tree)

[rows cols x] = size(I);

[num_anchors tree_depth] = size(delta_tree);

mask = zeros(rows,cols);

not_mask = ones(rows,cols);

i = 1;
j = 2;

anchor = anchor_tree{1,j};

while(isempty(anchor) == 0 && j <= tree_depth)

    while(isempty(anchor) == 0 && i <= num_anchors)

        anchor = anchor_tree{i,j};
        delta = delta_tree{i,j}/sqrt(3);

        if(isempty(anchor) == 0)

            max_val = anchor(1) + delta;
            min_val = anchor(1) - delta;

            temp = I(:, :, 1) <= max_val;
            temp = temp.*(I(:, :, 1) >= min_val);

            max_val = anchor(2) + delta;
            min_val = anchor(2) - delta;

            temp = temp.*(I(:, :, 2) <= max_val);
            temp = temp.*(I(:, :, 2) >= min_val);

            max_val = anchor(3) + delta;
            min_val = anchor(3) - delta;

            temp = temp.*(I(:, :, 3) <= max_val);
            temp = temp.*(I(:, :, 3) >= min_val);

            mask = mask + temp;

        endif

        i = i + 1;
    end
end

```

```
generate_category_mask (1)
    endwhile
    j = j + 1;
endwhile
mask = mask > 0;
not_mask = not_mask - mask;
endfunction
```