

CMSC 201 Data Structures (Fall 2022)
K-d Tree Project Grade Report for Henry

Category		Comments	Points	Your Score
Part One				
	Read binary image.	This is correct.	10	10
	Convert image to ColorGrid	Correct, too. You have an extra inner loop that seems superfluous to me. avgColor should check if region has no size and then use default color.	10	10
	Partition	buildImageTree has no significant errors.	20	20
	Homogeneity test	This is very good-no errors.	10	10
	Display orig and k-d tree	Good.	5	5
	Commenting (methods, algorithms)	Is fine--easy to read.	10	10
	Code design (variables, methods)	This is all excellent, well encapsulated and clear.	10	10
Part Two				
	Quality of Evaluation: 3 depths, quantitative comparison	You examine images at a depth. Your discussion in the report is reasonable, but needs more data support from the images you worked on.	5	4
	Writing and organization	just fine.	5	5
Part Three				
	Save	This does save elements in level order.	5	4
	Load	This would fail to reconstruct the same tree.	5	3
	Description	Not quite enough detail. comments might have compensated.	5	4
Total (Percentage Score)			100	95.00

General Comments:

You do a very nice job on Parts One and a fair job with the analysis in Part Two. I would like to have seen actual comparison of the sizes for image versus k-d tree version.

In Part 3 you note using level-order for tree storage which can work. Pre-Order is the easier case, since it makes sure the node you need is there in the tree and then you add left/right subtrees.

Commenting and organization were good except for save/load, which were most unique, but had very little at all.

Overall, I like the independence you showed in working on save/load. Sure they are not quite right, but your approach had many correct ideas.