Sample Structure of Report for Algorithms & Analysis Assignment 1

Student 1: name & student number

Student 2: name & student number

We certify that this is all our group's original work. If we took any parts from elsewhere, then they were non-essential parts of the assignment, and they are clearly attributed in our submission. We will show that we agree to this honour code by typing ``Yes'': YES.

Experimental Setup

Describe briefly how you generated your data?

What parameter settings you decide to test on, and briefly why?

Generation of scenarios – how did you decide to generate the scenarios? Briefly describe.

Timing - How did you perform the timing? How many tests did you perform and average over for each generated data set?

Evaluation

Scenario 1 (k-nearest neighbour searches)

[Sample text] We found that k, the number of nearest neighbours increased, the naive, brute force performance degraded (see Figure 1). We hypothesise the reason for this is that as k increases, it takes longer to check each point against the current k-nearest neighbour. Compare this kd-tree performance (Figure 2)….

Scenario 2 (Dynamic points set)

[Sample text] As we performed more adds and equivalent number of deletions to the kd-tree, we found that ...

Recommendation

For different scenarios, which data structures do you recommend to use?