

Summer 2023

Subject: Computer Science

Student: TIANYI YANG (Stephen)

Feedback |

Stephen spoke and wrote about data structures for searching and sorting data: self-balancing AVL trees, B trees, B+ trees and RB trees. It was good to see LaTeX used to prepare the document, and a strong bibliography further demonstrated great academic practice. Jim used diagrams to good effect in the presentation and the essay to help the audience understand. Jim's essay broadened the reader's understanding beyond key lookup problems with a discussion about disk access times and range queries. It was excellent to test the performance of implementations of each data structure.

A suggestion for improvement is to extend the test cases to larger datasets since, especially with small datasets, the start-up costs of the test can hide the pattern of the work done by each algorithm.