Advanced data structures for searching – additional material

These links may give you the context and perspective of learned materials so far. They may also give you inspiration for the *"Algorithmic study in blockchain gaming"*.

General

Latency numbers every programmer should know
Multilevel cache organization
Cache-oblivious algorithms extra

In-memory searching

2-3-4 trees (B-trees of order 4) are isomorphic to RB trees
RB tree in C++ std::set std::map (among others)
RB tree in Java TreeSet TreeMap
RB tree in k-means
RB tree in linux CPU process scheduling
Comparison AVL vs RB

Databases – algorithmic zoo

Database internals
LSM tree for write-intense DB

Blockchain

Blockchain data query issue
Blockchain vs relational database
The Graph querying protocol
Ora – searching Solana on-chain data
Blockchain indexing
Novel blockchain index structure based on subchain query

Hardware

How does solid state drive work?

FYI

B-tree as the default index method implementation (default in MySQL, as well)

LSM-tree as storage structure in Apache Cassandra