List of Interesting Data Structures

Arrays
- Array
- Bidirectional map
- Bit array
- Bit field
- Bitboard
- Bitmap
- Circular buffer
- Control table
- Dynamic array
- Gap buffer
- Hashed array tree
- Heightmap
- Iliffe vector
- Image
- Lookup table
- Matrix
- Parallel array
- Sorted array
- Sparse array
- Sparse matrix
- Variable-length array

Application-specific trees
- Abstract syntax tree
- Alternating decision tree
- Decision tree
- Expectiminimax tree
- Finger tree
- Game tree
- Minimax tree
- Parse tree
- Syntax tree

Binary trees
- AA tree
- AVL tree
- Binary search tree
- Binary tree
- Cartesian tree
- Pagoda
- Randomized binary search tree
- Red-black tree
- Rope
- Scapegoat tree
- Self-balancing binary search tree
- Splay tree
- Tango tree
- Threaded binary tree
- Top tree
- Treap
- T-tree
- Weight-balanced tree

B-trees
- 2-3 tree
- 2-3-4 tree
- B sharp tree
- B tree
- B*-tree
- B+ tree

Bx-tree
- Dancing tree
- Fusion tree
- Queap

Graphs
- Adjacency list
- Adjacency matrix
- And-inverter graph
- Binary decision diagram
- Directed acyclic graph
- Directed graph
- Graph
- Graph-structured stack
- Hypergraph
- Multigraph
- Propositional directed acyclic graph
- Scene graph
- Zero suppressed decision diagram

Hashes
- Bloom filter
- Distributed hash table
- Hash array mapped trie
- Hash list
- Hash table
- Hash tree
- Hash trie
- Koorde
- Prefix hash tree

Heaps
- 2-3 heap
- AF-heap
- Beap
- Binary heap
- Binomial heap
- D-ary heap
- Fibonacci heap
- Heap
- Leftist heap
- Pairing heap
- Skew heap
- Soft heap
- Ternary heap
- Treap

Lists
- Doubly connected edge list
- Doubly linked list
- Linked list
- Self-organizing list
- Skip list
- Unrolled linked list
- VList
- Xor linked list
- Zipper

Multiway trees
- (a,b)-tree
- And–or tree

Disjoint-set data structure
- Enfilade
- Exponential tree
- Fenwick tree
- Fusion tree
- Link/cut tree
- Spaghetti stack
- SPQR-tree
- Ternary search tree
- Van Emde Boas tree

Space-partitioning trees
- Adaptive k-d tree
- Bin
- BK-tree
- Bounding interval hierarchy
- BSP tree
- Cover tree
- Hilbert R-tree
- Implicit kd-tree
- Interval tree
- Kdb tree
- Kd-tree
- Linear octree
- Metric tree
- Min/max kd-tree
- M-tree
- Octree
- Quadtree
- R* tree
- R+ tree
- Range tree
- Rapidly-exploring random tree
- R-tree
- Segment tree
- UB-tree
- VP-tree
- X-tree
- Z-order

Tries
- B-trie
- Compressed suffix array
- Ctrie
- FM-index
- Generalised suffix tree
- Judy array
- Radix tree
- Suffix array
- Suffix tree
- Trie
- X-fast trie
- Y-fast trie

Other
- Lightmap
- Quad-edge
- Routing table
- Symbol table
- Winged edge