

GRAPH TRAVERSAL ALGORITHMS

GTA are methods used to visit and explore nodes or vertices in a graph or tree data structure. These algorithms are used to **search , traverse and retrieve** data from graphs. There are several types of graph traversal algorithms:

BFS(Breadth-First Search):

BFS is a fundamental graph traversal algorithm it begins with a node then first traverse all it's adjacent nodes. basically once all adjacent are visited , then their adjacent are traversed. **BFS** guarantee the shortest path between two node.

- *Data Structure used in BFS:*
 - **FIFO(First in First out):** data structure like *queue or list* when logic is first arrived first served.

example: like a line at the bank counter or a line at the cash.

Example : of a BFS Traversal











