

DSA STUDY GUIDE

Coding Interview Study Materials for Data Structure & Algorithm



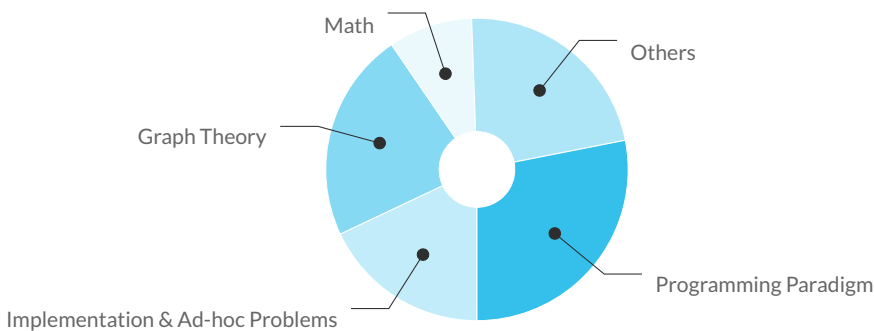
TIME & SPACE COMPLEXITY

- Bari's Algorithm Playlist(1-16)

DATA STRUCTURE

- Data Structures Full Tutorial from a Google Engineer

ALGORITHMS



IMPLEMENTATION & AD-HOC

- Implementation Section of Hackerrank

GRAPH THEORY

- Graph Theory Full Tutorial from a Google Engineer

MATH

- MIT 6.042J Mathematics for Computer Science(Playlist)
- MIT 6.042J Mathematics for Computer Science(Text)
- Competitive Programming Algorithms(Algebra Section)

OTHERS(STRING & BIT MANIPULATION)

- Competitive Programming Algorithms(String Section)
- HackerEarth Bit Manipulation Tutorial
- TopCoder Fun with Bits Tutorial

BEST DSA STUDY LINKS (GOLD)

- TopCoder Competitive Programming Tutorials
- Technical Interview Guide by Yangshun
- HackerEarth CodeMonk(Step by step Guide)

PROGRAM. PARADIGM

- Recursion
- Brute Force
- Backtracking
- Branch & Bound
- Divide & Conquer
- Greedy
- Dynamic Programming

RECURSION

- Recursion Playlist by mycode-school on Youtube
- Bari's Algorithm Playlist(18-29)
- SparkNotes on Types of Recursion
- Chapter 4 from Introduction to Algorithm by CLRS

DIVIDE & CONQUER

- Bari's Algorithm Playlist(18, 33-38)

BACKTRACKING

- Bari's Algorithm Playlist(63-67)

BRANCH & BOUND

- Bari's Algorithm Playlist(68-71)

GREEDY

- Bari's Algorithm Playlist(39-45)

DYNAMIC PROGRAM.

- Dynamic Programming Patterns by aatlyk on LeetCode.
- Bari's Algorithm Playlist(46-60)
- Tushar Roy's Dynamic Programming Playlist on Youtube
- MIT OCW Introduction to Algorithm(19,20-22,26-27,39-45)
- What is memoization and how can I use it in Python?