

1. Text Books

- a. [Introduction to Algorithms, Cormen, Second Edition](#)
- b. [Computer Algorithms, Sahini, Second Edition](#)
- c. [CLRS Solutions](#)
- d. [CLRS Book Chapterwise](#)

2. PPTs

- a. [David Luebke, University of Virginia](#)

3. Video Lectures

- a. [Cormen, MIT Video Lectures](#)
- b. [Erik Demaine, MIT Video Lectures](#)
- c. [Ravindra Babu Ravula, Video Lectures](#)
- d. [Abdul Bari, Youtube Channel](#)
- e. [Tushar Roy, Youtube Channel](#)

4. Lecture Notes

- a. [David Babcock, Greg Link \(York College of Pennsylvania\)](#)

5. YouTube Links Module wise

Module :1

- a. Amortized Analysis: Aggregate Analysis
<https://www.youtube.com/watch?v=Zhi5UUubz8Y&t=142s>
- b. Amortized Analysis: Accounting Method
<https://www.youtube.com/watch?v=29869iFHu6A>
- c. Amortized Analysis: Potential Analysis
<https://www.youtube.com/watch?v=fMlmb41qiFU>
- d. Amortized Analysis: Dynamic Tables
<https://www.youtube.com/watch?v=iy-WhloN6vA>
<https://www.youtube.com/watch?v=MTI8djZFWE0>

Module : 2

- a. Probabilistic Analysis : Hiring Problem
<https://www.youtube.com/watch?v=BD-NJekPgsY>
- b. Probabilistic Analysis : Randomized Algorithms
<https://www.youtube.com/watch?v=BD-NJekPgsY>
- c. Probabilistic Analysis : Indicator Random Variable (IRV)
<https://www.youtube.com/watch?v=xVQm3eTbmqs>
- d. Probabilistic Analysis : Analysing Hiring Problem using IRV
<https://www.youtube.com/watch?v=yQAw564S-Xg>
- e. Probabilistic Analysis : Birthday Paradox
<https://www.youtube.com/watch?v=1tnas6FQxX8>
- f. Probabilistic Analysis : Balls and Bins
https://www.youtube.com/watch?v=OOYI7_D2LvU

Module : 3

- a. Red Black Trees

- i. http://btechsmartclass.com/DS/U5_T4.html
- ii. <https://www.geeksforgeeks.org/red-black-tree-set-2-insert/>
- iii.

Module : 4

a. Maximum Flow Problems

- i. [Ford-Fulkerson Algorithm for Maximum Flow Problem](#)
- ii. [Ford Fulkerson algorithm for Maximum Flow Problem Example](#)
- iii. [Ford-Fulkerson Algorithm for Maximum Flow Problem Complexity](#)
- iv. [Coursera - Maximum Flow and Min Cut](#)
- v. [Flow Network - Audiopedia](#)
- vi. [Flow Network - Udacity](#)
- vii. [Maximum Flow - HackerEarth](#)
- viii. [MAximum Flow - Geeks for Geeks](#)

Module : 5

- 1. [Computational Geometry](#)