CSC 382 Analysis of Algorithms

Syllabus

Meeting Information

- Days, Times, & Room: Tu Th 10:10 AM – 12:05 PM @ 1N 114
- Homepage: http://www.cs.csi.cuny.edu/~chen/382
- Instructor: Cong Chen (cong.chen@csi.cuny.edu)
- Office Hours: Th 2:00 PM – 5:00 PM @ 4N 206

Grading Policy

- Attendance & Participation: 1 or 2 points each
- 4 Exams: 30 points each (Final may be a project instead of an exam)
- Grades:
  
  A: more than 89 points;
  B: 80 to 89 points;
  C: 70 to 79 points;
  D: 60 to 69 points;
  F: fewer than 60 points

Topics

- Easy Problems (Warm-up): Modulo, Iteration & Recursion, Array, Binary Search, Count
- Data Structures (Reviews): Vector, List, Hash, Tree

  — Exam I —

- Sorting and Order Statistics: Complexity, Big-O Notation, Bubble Sort, Insertion Sort, Selection Sort, Divide and Conquer, Merge Sort, Quick Sort, Heap Sort, Counting Sort

  — Exam II (Midterm) —

- Dynamic Programming: Top-Down, Bottom-Up, Shortest Path

- Graph Theory: Representation, Subgraphs, Minimum Spanning Tree, Dijkstra

  — Exam III —

- Graph Search: Connectivity, Topological Sort, DFS, BFS, Heuristic Search

  — Exam IV (Final) —