

### Topics for a presentation

1. Sorting algorithm Quicksort
2. Sorting algorithm Heapsort
3. Insertion sort
4. Shell sort
5. Binary tree sort
6. DNA computing
7. Reaction-diffusion computing
8. Rice's Theorem
9. Universal Turing machine
10. Liquid marble computing
11. Vertex Cover problem
12. Chromatic Index problem
13. Quadratic Diophantine Equations problem
14. Shortest Common Superstring problem
15. Maximum Leaf Spanning Tree problem
16. Spiking P neuron system
17. Hamiltonian Path problem
18. Ramsey's problem of optimal saving
19. Balanced 0–1 matrix problem
20. Normal algorithm of Markov
21. Egg dropping puzzle
22. Cellular automata
23. Cocke–Younger–Kasami (CYK) algorithm
24. Algorithm Blum — Blum — Shub, BBS
25. Knuth's word wrapping algorithm
26. Viterbi algorithm
27. Earley algorithm
28. Needleman–Wunsch algorithm
29. Floyd's all-pairs shortest path algorithm
30. Selinger algorithm
31. De Boor algorithm
32. Penalty method
33. Highway search algorithm
34. Duckworth–Lewis method
35. Post machine
36. Bellman–Ford algorithm
37. Maximum subarray problem
38. Integer programming
39. Cutting stock problem
40. A\* search algorithm
41. Set inversion problem
42. Functional programming
43. Post-office problem
44. Backward induction
45. Boyer–Moore string-search algorithm

46. Rabin–Karp algorithm string-search algorithm
47. Aho–Corasick string matching algorithm
48. Commentz-Walter algorithm
49. Tile Assembly computing
50. Tag rewriting system
51. Partially recursive functions
52. Counter automata
53. Universal Petri nets
54. R-schemes
55. Program design language
56. UML
57. Logical programming
58. Data flow programming
59. OpenMP
60. Message Passing Interface
61. Programming on GPU: CUDA
62. Girvan–Newman algorithm
63. Bron–Kerbosch algorithm
64. Borůvka's algorithm
65. Havel–Hakimi algorithm
66. Christofides algorithm
67. Sethi–Ullman algorithm
68. Karger's algorithm
69. Dulmage–Mendelsohn decomposition
70. Stoer–Wagner algorithm
71. Cuthill–McKee algorithm

The presentation should contain exactly 10 slides in pdf format named by the surname and the variant number, for instance zaitsev-64.pdf. Slides represent a piece of art composition of textual and graphical information not too dense and not too sparse. Usually 1 minute of oral presentation is planned per slide.

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