*Topics:*

1. Introduction - Don’t be afraid to think random!
2. Las Vegas Method vs Monte Carlo Method
3. Sorting, Median, Rank in Unsorted Array, Majority Element
4. Hashing/Fingerprinting
5. Matrix Multiplication Verification ([Freivalds' algorithm](https://en.wikipedia.org/wiki/Freivalds%27_algorithm))
6. Primality Testing, Prime Factorization
7. Miscellaneous Applications: Hash Table, Treap, Maximum Matching
8. Problem Discussion

*Practice Problems:*

1. <https://ipsc.ksp.sk/2017/real/problems/d.html>
2. <http://codeforces.com/contest/364/problem/D>
3. <http://codeforces.com/contest/798/problem/D>
4. <http://codeforces.com/contest/23/problem/C>
5. <http://codeforces.com/contest/375/problem/A>
6. <http://codeforces.com/contest/852/problem/A>
7. <http://codeforces.com/contest/843/problem/B>
8. <http://codeforces.com/gym/101341/problem/I>
9. <http://codeforces.com/gym/100851/problem/J>
10. <http://codeforces.com/contest/717/problem/H>
11. <http://codeforces.com/contest/753/problem/C>
12. <http://codeforces.com/contest/329/problem/C>
13. <http://codeforces.com/contest/802/problem/D>
14. <http://codeforces.com/contest/584/problem/D>
15. <http://codeforces.com/gym/100502/problem/B>
16. <http://codeforces.com/contest/618/problem/F>
17. <https://uva.onlinejudge.org/external/109/10982.pdf>
18. <https://uva.onlinejudge.org/external/121/12109.pdf>
19. <https://ipsc.ksp.sk/2016/real/problems/b.html>
20. <http://codeforces.com/gym/100203/problem/C>
21. <https://www.codechef.com/problems/OVERPNT>
22. <https://open.kattis.com/problems/pizzaproblems>
23. <http://codeforces.com/gym/100512/problem/J>
24. <https://www.codechef.com/IPC15P2B/problems/NOPI>
25. <https://goo.gl/E4w7Xc>
26. <http://codeforces.com/gym/100518/problem/D>
27. <http://codeforces.com/gym/101383/problem/C>
28. <https://code.google.com/codejam/contest/4314486/dashboard#s=p2>
29. <https://code.google.com/codejam/contest/dashboard?c=6254486#s=p2&a=2>
30. <http://codeforces.com/contest/862/problem/C>
31. <http://codeforces.com/gym/101630/problem/I>
32. <http://codeforces.com/contest/906/problem/B>
33. <http://codeforces.com/problemset/gymProblem/100341/B>
34. Dhaka Regional Preliminary 2017 E, Anti Hash

*Resources:*

1. <https://web.stanford.edu/class/archive/cs/cs161/cs161.1138/handouts/100%20Guide%20to%20Randomized%20Algorithms.pdf>
2. <https://courses.engr.illinois.edu/cs473/sp2011/Lectures/14_notes.pdf>
3. <https://people.mpi-inf.mpg.de/~funke/Courses/randalg/lecture1.pdf>
4. <http://users.eecs.northwestern.edu/~nickle/randAlg/Karp91.pdf>
5. <http://codeforces.com/blog/entry/51244>
6. <https://www.topcoder.com/community/data-science/data-science-tutorials/understanding-probabilities/>
7. <https://www.quora.com/What-is-the-intuition-behind-randomized-algorithms-and-randomization-in-general>
8. <http://www.cs.yale.edu/homes/aspnes/classes/469/notes.pdf>