

Csc 86020 Probabilistic Analysis & Randomized Algorithms

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Description: In this course, we will cover tools used in probabilistic analysis and basic randomized algorithms. Topics include tail bounds for random variables; load-balancing algorithms, namely how to assign jobs to machines so as to minimize the maximum load; Bloom filters and hashing techniques for identifying duplicates and popular items in massive and/or streaming data sets; random graph models (e.g. used in modeling the structure of the Internet and large social networks).